Fortification Range Wilderness
Parsnip Peak Wilderness
White Rock Range Wilderness

Final
Wilderness Management Plan
and
Environmental Assessment

U.S. Department of the Interior
Bureau of Land Management
Nevada State Office

December 2008

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Introduction

Scope of the Wilderness Management Plan

This Plan provides the primary management guidance for the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas. Given their close proximity, comparable natural resources, and similar management issues, it is appropriate to incorporate the administration of the three areas into a single ten year Plan. This Plan also addresses appropriate actions immediately adjacent to the wilderness areas including wilderness access and information provided to the public.

Wilderness characteristics are cumulatively identified by the Wilderness Act of 1964 as untrammeled (i.e., unrestrained, unhindered) by man, natural, undeveloped, having outstanding opportunities for solitude or primitive, unconfined forms of recreation, and the inclusion of supplementary values. This Wilderness Management Plan (WMP) preserves the areas' characteristics by:

- Identifying the conditions and opportunities for which the wilderness areas would be managed.
- Creating specific guidelines for managing resources and activities existing in the wilderness.
- Identifying management needs outside of, and immediately adjacent to the wilderness areas including signing, staging areas, and access points.

The first part of the Plan contains current comprehensive descriptions of the wilderness areas and proposed management actions and guidelines. The second part is an Environmental Assessment (EA) fully describing and analyzing potential impacts relating to proposed management actions and guidelines and considered alternatives.

This WMP is in conformance with the goals, objectives, and decisions analyzed within the scope of the Bureau of Land Management (BLM) Ely District Record of Decision and Approved Resource Management Plan (2008).

This WMP is in conformance with the decisions analyzed within the Wilderness Disturbance Reclamation Environmental Assessment (NV-040-05-010).

An examination of the WMP compared with the Pinyon Management Framework Plan, prepared by the Cedar City Field Office in 1983, reveals the WMP is in conformance with the scope and intent of the Pinyon Management Framework Plan.

BLM planning regulations (43 Code of Federal Regulations 1610.3.2[a]) require that BLM resource management plans be consistent with officially approved plans of other federal, state, local and tribal governments to the extent those plans are consistent with

federal laws and regulations applicable to public lands. Although this regulation does not apply to other official plans created after the land use plan is implemented, the BLM strives for management decisions to be consistent with other official plans.

The Wilderness Management Plan is not consistent with the Lincoln County Public Land & Natural Resource Management Plan of 1997. The plan states "No additional wilderness areas shall be designated in Lincoln County." The Lincoln County Commission did support the Lincoln County Conservation, Recreation, and Development Act of 2004 wherein these wilderness areas are designated.

This WMP is consistent with the Beaver County Utah Land Use Plan (1998).

Compliance with Laws, Statutes, and Regulations

The proposed action and alternatives are in compliance with the following laws:

- The Wilderness Act of 1964 (16 U.S.C. §§ 1131-1136, September 3, 1964, as amended 1978).
- The Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701-1782, October 21, 1976, as amended 1978, 1984, 1986, 1988, 1990-1992, 1994 and 1996).
- The Lincoln County Conservation, Recreation and Development Act of 2004 (Public Law 108-424).
- The National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347, January 1, 1970, as amended 1975 and 1994).
- The Endangered Species Act of 1973 (16 U.S.C. §§ 1531-1544, December 28, 1973, as amended 1976-1982, 1984, and 1988).
- Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d, June 8, 1940, as amended 1959, 1962, 1972, and 1978).
- Migratory Bird Treaty Act (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989).
- Executive Order 13186─Responsibilities of Federal Agencies to Protect Migratory Birds (2001).
- Management of Designated Wilderness Areas (43 CFR Part 6300).
- Recreation Management Restrictions: Occupancy Stay Limitation (43 CFR 8365.1-2(a) and Federal Register Notice NV-930-4333-02).
- Unlawful Manner of Camping Near Water Hole (Nevada Revised Statute 503.660).

Relationship to Policies and Guidelines

The proposed action and alternatives are in conformance with the following guidelines, manuals, and Administrative Laws:

- Management of Designated Wilderness Areas (BLM Manual 8560).
- Wilderness Management Plans (BLM Manual 8561).

- Grazing Guidelines (House Report No. 101-405, Appendix A).
- Wildlife Management Guidelines (House Report No. 101-405, Appendix B).
- BLM Emergency Stabilization and Rehabilitation Handbook.

Wilderness Overview

The Fortification Range, Parsnip Peak and White Rock Range Wilderness areas were added to the National Wilderness Preservation System by the Lincoln County Conservation, Recreation and Development Act of 2004 (Public Law 108-424, November 30, 2004; LCCRDA). The Fortification Range is 30,656 acres; the Parsnip Peak Wilderness is 43,693 acres; and the White Rock Range Wilderness is 24,413 acres. These three wilderness areas are managed entirely by the Bureau of Land Management, Ely District Office. No private in-holdings are present, although several private parcels are located along the boundaries of each of the three wilderness areas. WMP Map 1 presents an overview and WMP Maps 2─4 (Pages 5, 7─9) present the current conditions of each of the wilderness areas.

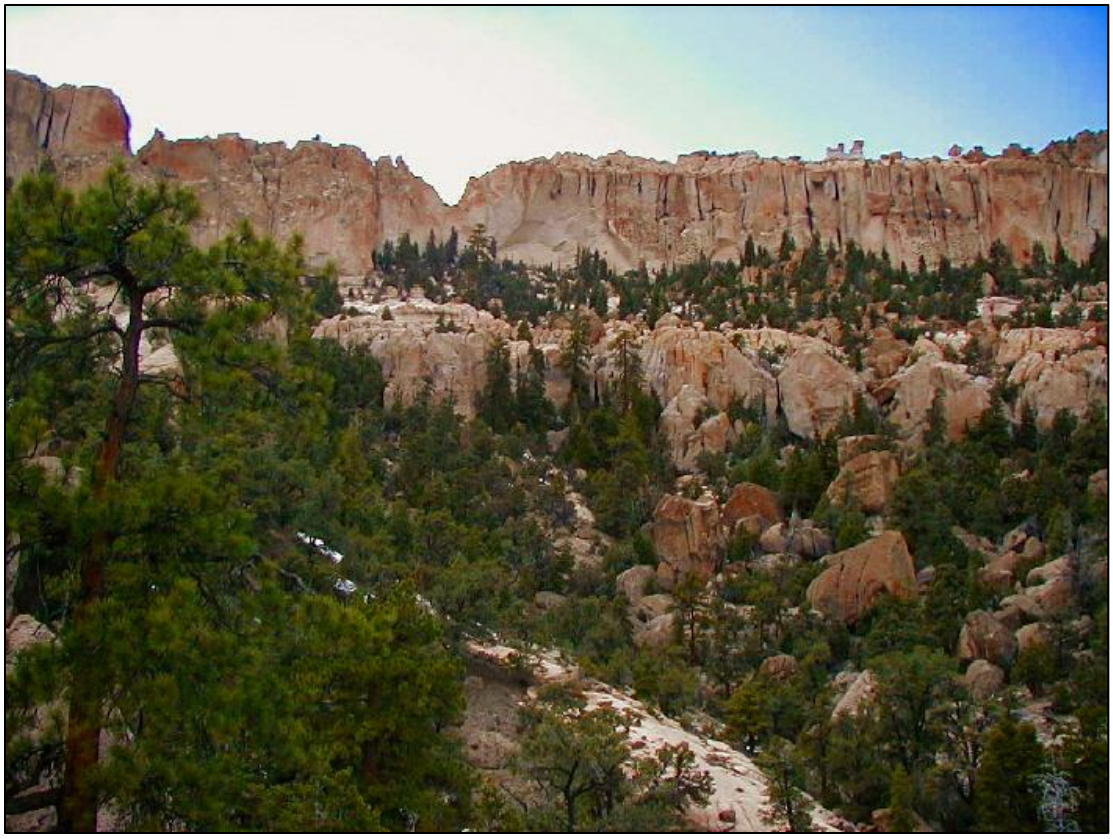
Adjacent to and directly east of the White Rock Range Wilderness in Utah is the 2,800 acre BLM White Rock Range Wilderness Study Area. This wilderness study area is managed by the Utah Bureau of Land Management, Cedar City Field Office.

The Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas are located within the Great Basin ecoregion 10 to 50 miles north and northeast of Pioche in Lincoln County, Nevada. The elevations range from approximately 6,100 to 9,100 feet. Great Basin pinyon-juniper woodlands are the dominate vegetation community throughout, with mountain ascents and peaks marked with aspen, mixed conifer forests and montane sagebrush communities. Descending from range to valley, foothill mountain mahogany communities lead to Wyoming big sagebrush shrubland.

On terrain ranging from precipitous cliffs to rolling foothills to windswept plateaus, wildlife in the wilderness areas are abundant and diverse. Game animals, including mule deer (*Odocoileus hemionus*) and Rocky Mountain elk, (*Cervus elaphus*) browse aspen groves and thickets of mountain mahogany throughout the area, while pronghorn antelope bolt across low sage flats surrounding the Fortification Range Wilderness.

No known threatened or endangered species occupy the Fortification Range, Parsnip Peak, or White Rock Range Wilderness Areas. Based on existing habitat and previously collected data, sensitive species including ferruginous hawk (*Buteo regalis*), greater sage-grouse and prairie falcon (*Falco mexicanus*), occur within the wilderness areas.

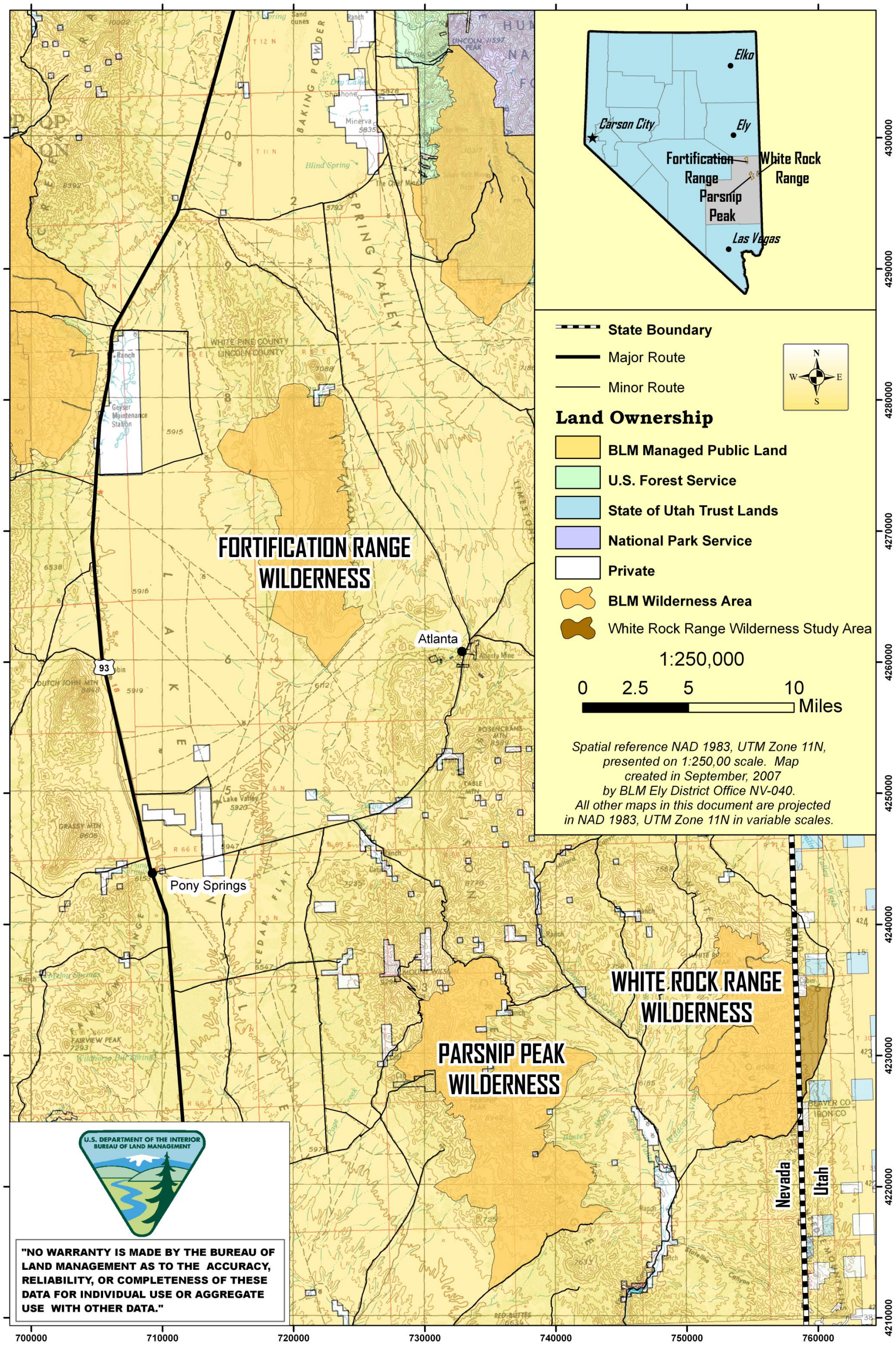
There are no designated Areas of Critical Environmental Concern within or immediately adjacent to these wilderness areas.



Fortification Range Wilderness

View from Lake Spring in White Rock Range Wilderness

WMP Map 1: Overview of Wilderness Areas

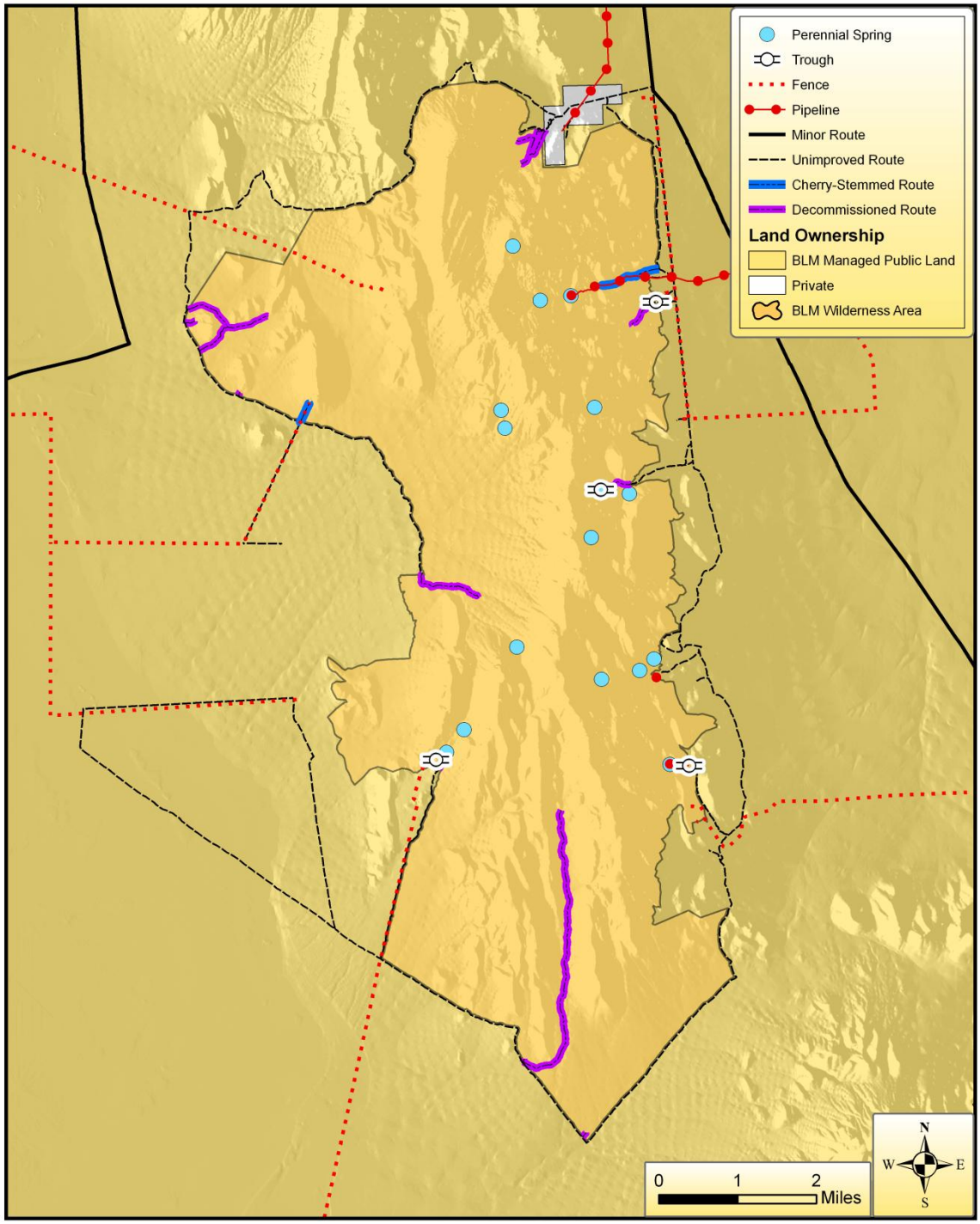


Many intermittent streams carry precipitation in the form of rain and snowmelt through the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas, and at least 98 perennial springs in the three wilderness areas discharge water from local and regional aquifers. Many of the perennial springs in the wilderness areas have been developed for livestock use. There are no existing wildlife water developments within these wilderness areas.

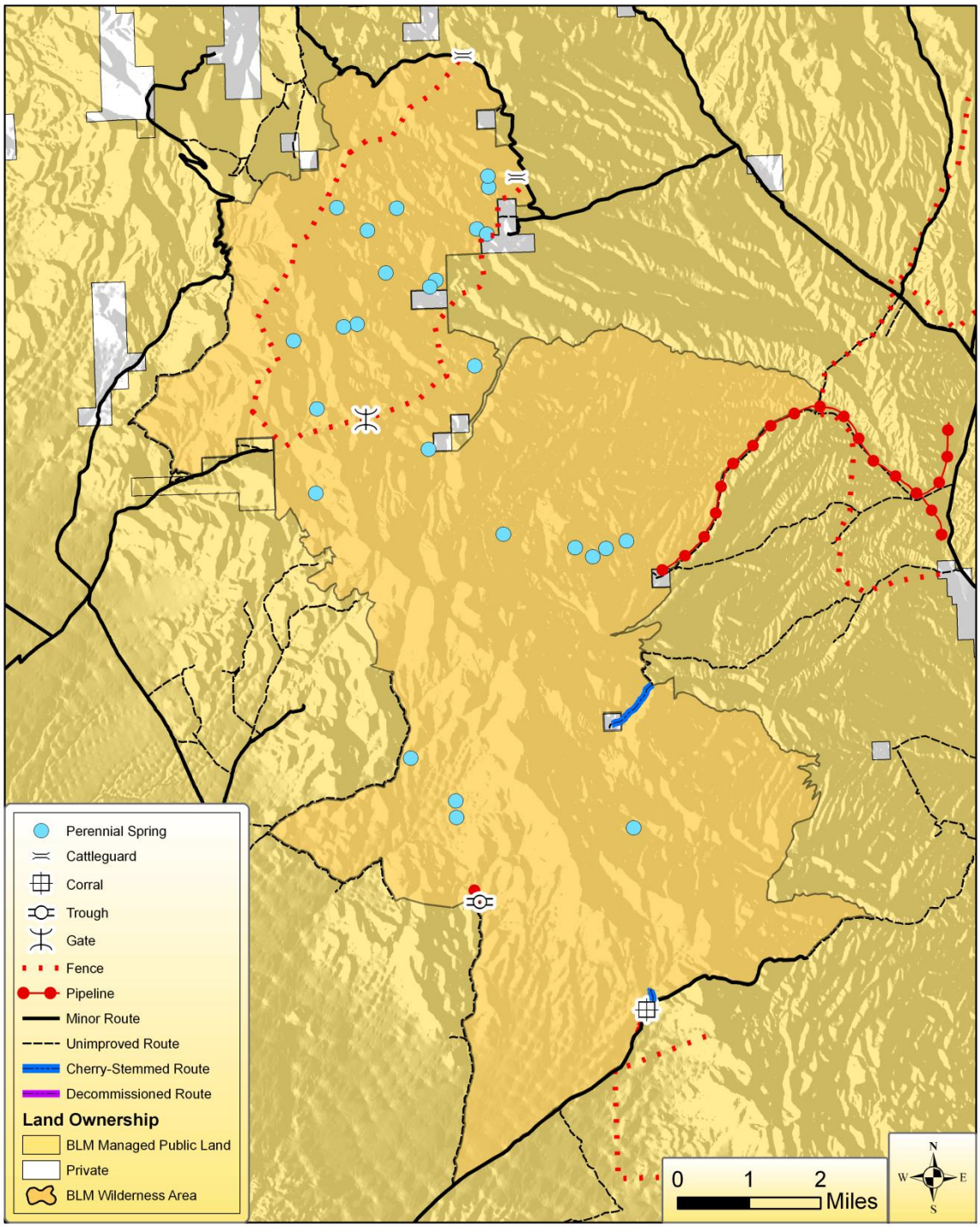
Several human-caused developments and disturbances occur within the areas, including many active and abandoned range developments, several miles of fence line across all three areas and 30.5 miles of decommissioned vehicle routes, which are identified on WMP Maps 2─4 (See pages 7─9). No known areas of high mineral resource potential have been identified in the wilderness areas.

The Parsnip Peak Wilderness

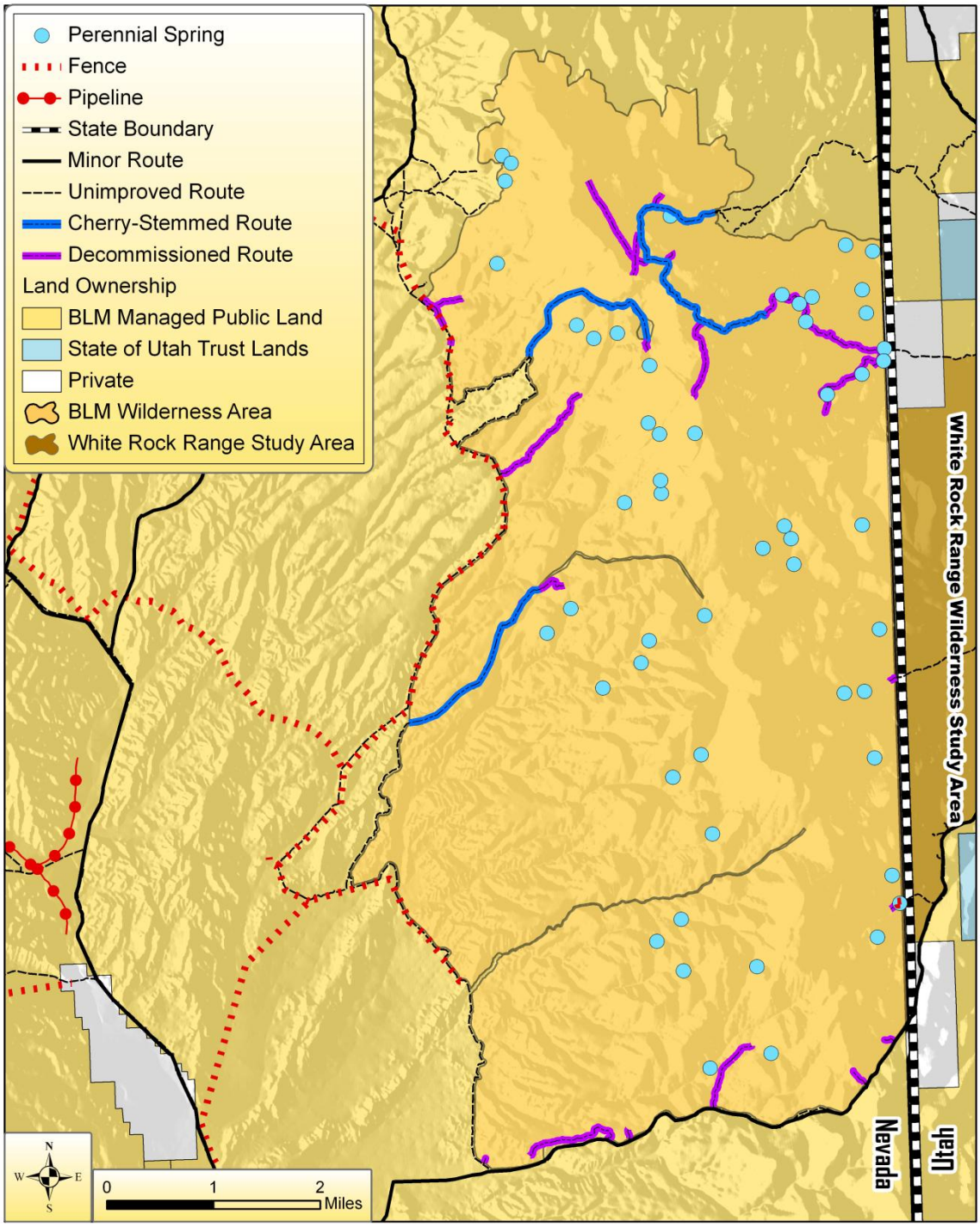
WMP Map 2: Existing Condition for Fortification Range Wilderness



WMP Map 3: Existing Condition for Parsnip Peak Wilderness



WMP Map 4: Existing Condition for White Rock Range Wilderness



Wilderness Characteristics

The Wilderness Act of 1964 defines wilderness and mandates that the primary management direction is to preserve wilderness character. Although wilderness character is a complex idea and was not explicitly defined in the Wilderness Act, wilderness characteristics are commonly described in the Wilderness Act as:

- **Untrammeled** ─ area is unhindered and free from modern human control or manipulation.
- **Natural** ─ area appears to have been primarily affected by the forces of nature.
- **Undeveloped** ─ area is essentially without permanent improvements or human occupation and retains its primeval character.
- **Outstanding opportunities for solitude or a primitive and unconfined type of recreation** ─ area provides outstanding opportunities for people to experience solitude or primitive and unconfined recreation, including the values associated with physical and mental inspiration and challenge.
- **Supplemental values** ─ complementary features of scientific, educational, scenic or historic values.

The Fortification Range, Parsnip Peak, and White Rock Range Wilderness areas have few trammeling activities. Trammeling activities include various measures in the management of wildland fire and weeds, the presence of authorized allotment fences, pipelines and range developments, the presence of former vehicle routes, and the rehabilitation work that has been done on them.

The naturalness and primeval character is generally preserved. However, some changes to the native vegetation composition have occurred, including infestations of bull thistle, Dalmatian toadflax, and cheatgrass.

Several large wildfires have occurred in the wilderness areas in the last ten years. In the Parsnip Peak Wilderness, the Buster Fire affected the southeast area in 2002, and the Parsnip Fire affected the east-central area in 2000. Smaller wildfires include the 2004 Pierson Summit Fire in the southern area. In the White Rock Range Wilderness, the large Whiterock and Parsnip Fires affected the eastern area in 2002. All of these wildfires affected the vegetation communities and may have encouraged cheatgrass establishment in some areas. No known wildfires have occurred in the Fortification Range Wilderness since 1974.

Non-native Rio Grande wild turkeys (*Meleagris gallapavo intermedia*) were released by the Nevada Department of Wildlife (NDOW) outside of the White Rock Range Wilderness for hunting and can now be found in the wilderness. Wild horses are present in all three areas.

Most land in these wilderness areas remains undeveloped. What developments there are in these areas include range developments, such as fence lines, pipelines and troughs, former vehicle routes and trails, including 9 miles of former vehicle routes and

approximately one mile of trail created by wild horses, livestock and/or game in the Fortification Range Wilderness, 10.7 miles of former vehicle routes in the Parsnip Peak Wilderness and 10.8 miles of former vehicle routes in the White Rock Range Wilderness.

Outstanding opportunities for solitude and primitive, unconfined recreation are present in all three wilderness areas. Remote ridges, canyons, and drainages in these three areas provide excellent opportunities for solitude. The rugged terrain, scattered rocky outcrops, and prehistoric sites in these areas provide for recreation opportunities such as hiking, camping, hunting, heritage tourism, nature study, and horseback riding. Only the BLM standard 14-day stay limit for camping in all three areas confines recreational opportunities (43 CFR 8365.1-2(a) and Federal Register Notice NV-930-4333-02).

Special features found in the Fortification Range Wilderness include the huge natural amphitheater at the head of the Cottonwood Canyon drainage, multi-hued pink sculpted rock formations and dazzling white spires, stands of aspen and ponderosa pine and the sheer cliffs and rocky outcrops for which the range was named. Special features found in the Parsnip Peak Wilderness include the numerous prehistoric sites in the Mount Wilson Archaeological District, including interesting rock alignments and rock art. Special features found in the White Rock Range Wilderness include stands of aspen and white fir, numerous springs, grassy meadows, and volcanic boulders and strangely eroded volcanic ash and columnar peaks jutting over the trees.

Volcanic Tuft in Fortification Range Wilderness

Wilderness-Specific Issues

Issues to be addressed in the Wilderness Management Plan were identified through public scoping in the form of workshops, meetings, written letters, and email, by BLM staff and by a Technical Review Team set up by the Lincoln County Coordinated Resource Management Steering Committee. The Technical Review Team met on March 28, 2007 and provided input into issues and management direction. A letter requesting public input was sent to individuals and organizations on the Ely District Office wilderness mailing list on March 6, 2007. A public scoping workshop was held at the Caliente Field Office on April 10, 2007. A meeting was held with grazing permittees affected by this Plan on May 29, 2007. The Proposed Wilderness Management Plan was presented at a Tribal Coordination Meeting in the Ely BLM District Office on January 17, 2007; no comments or concerns were raised at this meeting. All issues and concerns were considered during the development of the range of alternatives described in the EA following this Plan. Issues in the three wilderness areas to be addressed in this wilderness management plan that were identified through public scoping are as follows:

1. Opportunities for solitude and primitive, unconfined recreation:

   - Recreational uses including heritage tourism, camping, hiking, horseback riding and particularly hunting.
   - Hunting guide service use of the area.
   - Defining maintenance levels for boundary roads and cherry-stemmed vehicle access routes.
   - Monitoring of visitor use levels.
   - Establishment, maintenance, signing and management of designated or visitor-developed trails.
   - Designation of vehicle access points.
   - Maps, brochures, and kiosks providing information to the public.
   - Management and protection of archaeological resources, especially rock carvings and alignments.

2. Protecting and enhancing the undeveloped and natural appearance of the wilderness areas:

   - Prevention of motorized trespasses into wilderness.
   - Restoration of surface disturbances, including former vehicle routes and mining disturbances.
   - Removal of unnecessary facilities and trash.
   - Posting wilderness boundaries.
   - Working with private landowners whose land is adjacent to wilderness boundaries.

3. Preserving naturalness, primeval character and influence of the wilderness areas:

   - Trapping, transplanting, and relocating wildlife.

- Management of wild horses.
- Management of fire.
- Emergency stabilization and rehabilitation following fire or other disturbing actions in wilderness.
- Using non-native species to reseed after fires that would allow for the succession and long-term establishment of native species and prevent the spread of cheatgrass.
- Management of noxious and invasive plant species including use of biological control agents.
- Inventory, monitoring, and research of flora, fauna, paleontological and archaeological resources.
- Management of threatened and endangered species, and other species of special interest or concern.
- Restoration of unique vegetative communities such as aspen and ponderosa pine.

4. Management of special non-wilderness land uses allowed by the Wilderness Act:

    - Managing access and necessary maintenance of existing authorized range facilities inside wilderness.
    - Process for emergency operations, including retrieval of downed military aircraft and livestock emergencies inside wilderness.
    - Process of consideration for the installation of wildlife water developments inside wilderness.

5. Wilderness Management:

    - Using monitoring to adjust management actions.
    - Use education and interpretation to help visitors understand the wilderness resource.

Some issues identified during public scoping are already addressed in existing planning documents or policy, and are not within the scope of this Plan. These are listed below and in the EA which follow the wilderness management plan:

- Opening former vehicle routes in wilderness to motorized travel ─ The Wilderness Act prohibits motorized vehicles in wilderness.
- Managing airspace above wilderness ─ The BLM does not have the authority to manage air space.
- Amending wilderness boundaries ─ Wilderness boundaries are designated by Congress and legislation would have to be enacted to authorize any changes.
- Use of volunteers in posting of wilderness boundaries ─ Responsibility for delineating wilderness boundaries are delegated to BLM staff only.
- Allowing for the future possibility of installing water resource facilities such as pipelines and water tanks ─ Restrictions on new water resource facilities is

stated in the Lincoln County Conservation Recreation and Development Act of 2004.

- Elimination of grazing ─ The Wilderness Act explicitly allows grazing to continue at rates previous to wilderness designation.
- Numerous general comments that this Plan does not have the authority to **address.**

Wilderness Management Goals and Objectives

Direction and purpose for managing Wilderness is guided by four primary goals as defined in Appendix 1 of the BLM wilderness management planning manual (BLM Manual 8561). In turn, each of these goals is refined into specific associated objectives and in turn each objective is coupled with a management action(s) that will lead to accomplishment of the objective and the goal. This section outlines the goals and objectives for this wilderness management plan.

Goal 1	To provide for the long-term protection and preservation of the areas' wilderness character under a principle of non-degradation. The areas' natural condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historic value present would be managed so that they would remain unimpaired.

Objectives

- Preserve the primeval character and influence of the wilderness areas by managing for the integrity of an indigenous Great Basin ecosystem, including generally reducing non-native plants in favor of native plants.
- Manage wildlife habitat and wild horses to provide for healthy, viable, and naturally distributed wildlife populations with the least amount of action necessary.
- Preserve the primeval character and influence of the wilderness by allowing fire as a natural process of disturbance and succession where the ecosystem is fire-dependent; manage fire where it threatens wilderness character and/or natural ecological conditions or processes; prevent fire where it threatens human life or property.
- Protect and preserve the outstanding archaeological and historic resources of these areas while allowing for visitor enjoyment of those resources.

Goal 2	To manage the wilderness areas for the use and enjoyment of visitors in a manner that would leave the areas unimpaired for future use and enjoyment as wilderness. The wilderness resource would be dominant in all management decisions where a choice must be made between preservation of wilderness character and visitor use.

Objectives

- Provide for the use and enjoyment of the wilderness, along with outstanding opportunities for primitive recreation and solitude, in such a way that protects natural conditions with minimal on-the-ground developments and minimal regulation of visitor activities.
- Provide for vehicle access to the boundaries of the wilderness areas while also deterring vehicles from entering the wilderness areas.
- Emphasize education and interpretation to manage visitor activities.

Goal 3	To manage the wilderness areas using the minimum tool, equipment, or structure necessary to successfully and safely accomplish the objective. The chosen tool, equipment, or structure should be the one that least degrades wilderness values temporarily or permanently. Management would seek to preserve spontaneity of use and as much freedom from regulation as possible.

Objective

- Implement proposed actions as necessary to meet minimum requirements for the administration of the areas as wilderness and to have the least impact to wilderness characteristics.

Goal 4	To manage non-conforming but accepted uses permitted by the Wilderness Act and subsequent laws in a manner that would prevent unnecessary or undue degradation of the areas' wilderness character. Non-conforming uses are the exception rather than the rule; therefore, emphasis is placed on maintaining wilderness character.

Objectives

- Allow for special provision land uses determined by the Wilderness Act or LCCRDA while minimizing developments, degradation to naturalness, and other impacts to wilderness resources.
- Maintain or enhance the natural appearance of the wilderness areas by removing unnecessary facilities and minimizing or restoring human-caused surface disturbances.

- Assess potential commercial services of the wilderness areas for their economic importance and prevent negative impacts on wilderness characteristics.

Current Situations and Assumptions

Current Situation	No federally listed threatened or endangered species have been documented in these wilderness areas. Ferruginous hawk, greater sage-grouse, and prairie falcon, which are designated as BLM sensitive species, are known to occur. Non-native Rio Grande turkeys occur as a result of releases conducted by NDOW outside of wilderness. Wild horse populations and livestock are impacting vegetation and water resources in these wilderness areas despite wild horse population numbers being decreased to Appropriate Management Level (AML) in February 2007.

Assumption

One aspect of preserving the wilderness areas' natural and primeval character involves the maintenance of healthy, viable, and naturally distributed wildlife populations. However, Rio Grande turkey populations will remain and will increase in abundance in these wilderness areas. Additionally, between gathers wild horse populations will increase beyond AML numbers and negative impacts to resources will continue.

Rationale for Assumption

Over the life of this Plan it may be necessary to implement wildlife management activities to prevent degradation or enhance this wilderness characteristic. Turkey releases will continue outside of wilderness boundaries and they likely will move to favorable habitat located within wilderness. Wild horse gathers are scheduled to occur approximately every five years. Between gathers, population fluctuations may occur and could lead to resource degradation.

Current Situation	There are numerous archaeological and historic resources in these wilderness areas, including the Mount Wilson Archaeological District in the Parsnip Peak Wilderness. Current visitation is low.

Assumption

The potential for damage to historic and archaeological resources in these wilderness areas may increase.

Rationale for Assumption

Increased population growth combined with increased awareness of wilderness recreation opportunities and an increase in illegal trafficking of historic and archaeological resources will lead to increased visitation.

Current Situation	Preservation of the natural character of these wilderness areas is currently affected by infestations of invasive annual grasses and noxious weeds such as bull thistle, Dalmatian toadflax, and cheatgrass. This in turn has changed the frequency, seasonality, and intensity of the natural fire regime, as well as further fostering infestations of introduced plant species.

Assumption

Over the life of this Plan, further establishment of invasive grasses and weeds could impair ecological integrity within wilderness, which may degrade wilderness character. Disruption of native vegetation has the potential to further change natural fire regimes in all three areas.

Rationale for Assumption

The combination of possible continued motorized trespass, increased recreational use, increased fuel load, and an unnatural fire regime may further the establishment of noxious weeds and invasive plant species, which in turn would impair proper ecological function and continue to alter fire regimes in these wilderness areas.

Current Situation	Opportunities for solitude in all three areas are high with a slight decrease during hunting season; hunting is currently the most popular activity. No formal hiking or horse trails exist. However, numerous access points, pullouts, and primitive camping areas exist at various locations along the wilderness boundaries. Motorized trespass into wilderness is common at a few locations.

Assumption

The types and frequency of recreational use will increase leading to the establishment of user-created trails and added primitive campsites in and around the wilderness boundaries.

Rationale for Assumption

The increased and northward population expansion from southern Nevada, an increase in hunting popularity and shed antler collection in the area, and an increase in public awareness and demand for information regarding wilderness recreation opportunities in wilderness will create the need for recreation management and wilderness education.

Current Situation	Fire history research and wildlife surveys have previously been conducted in these wilderness areas.

Assumption

Over the life of this Plan, research proposals will be submitted and reviewed for approval.

Rationale for Assumption

BLM wilderness management policy states that "research is permitted and encouraged as long as all projects are conducted in such a manner as to preserve the area's wilderness character and they further the management, scientific, educational, historical, and conservation purposes of the area."

Current Situation	Existing surface disturbances include administrative access routes, several cherry stems, multiple former 4WD routes, archaeological resources, as well as historic artifacts and structures primarily related to ranching and mining.

Assumption

Preserving the natural appearance of these wilderness areas will require limited management.

Rationale for Assumption

Former motorized vehicle routes will need to be rehabilitated to restore the natural appearance and to help prevent future illegal trespass into wilderness. Other surface disturbances not deemed historic will likely require work to remove or rehabilitate them.

Current Situation	Guide services are the only commercial service in these wilderness areas. Use is predominantly in the White Rock Range Wilderness area.

Assumption

Guide services and outfitters will continue and may become more popular over the life of this Plan. Additional legal commercial services may occur in the future.

Rationale for Assumption

Hunting through the use of guide services is popular in these wilderness areas. Awareness of accepted commercial services in wilderness will increase over the life of this Plan.

Current Situation	There are several non-conforming but accepted trammeling activities permitted by the Wilderness Act (1964), the Lincoln County Conservation, Recreation and Development Act (2004), and Congressional Grazing Guidelines (excerpt from House Report 101-405, 1990). These include active grazing allotments, the presence of authorized allotment fences, pipelines, and water troughs. Mechanized or motorized equipment is allowed when deemed necessary to meet minimum requirements for the administration of these three areas as wilderness and/or for emergencies such as fire suppression or search and rescue activities.

Assumption

Over the life of this Plan maintenance of authorized allotment fences, pipelines, and water troughs, may be required. Additionally, there may be a need for emergency or administrative use of mechanized equipment in one or more of the three wilderness areas.

Rationale for Assumption

Prior to wilderness designation the maintenance of range developments and livestock management required the occasional use of mechanized or motorized equipment. Fires have occurred and will occur again over the life of the Plan.

Current Situation	At the request of NDOW (Nevada Department of Wildlife), USDA—APHIS Wildlife Services (United States Department of Agriculture — Animal and Plant Health Inspection Service) has set traps for coyotes in support of managing declining mule deer populations in White Rock Range.

Assumption

In the future, Federal, State, or local agencies, and private organizations or individuals may request APHIS—Wildlife Services to conduct wildlife damage management

activities for the protection of special status and game species and to prevent serious losses of livestock.

Rational for Assumption

Protection of special status species continues to be of great importance, and certain game populations have been in decline. Grazing of livestock will be a continuing activity and require actions to remove predators.

Management Strategy

The management strategy for the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas is to maintain or improve the natural, near-pristine conditions present today while rehabilitating existing and future disturbances.

Wilderness Management Actions

Due to their proximity and similar management issues, management actions are virtually the same for all three areas, except for site-specific proposed actions. All management actions, including site specific actions, are described in this Plan and in the Environmental Assessment following this Plan. Based on the current situation and assumptions, national wilderness goals, wilderness management objectives, and wilderness-specific issues that were identified through scoping, the following actions will guide the management of these areas. This Plan is supplemental to and consistent with wilderness laws, regulations, and policies, which must be further consulted in the event of future and unforeseen issues. WMP Maps 6, 8─10 (See Pages 38, 47─49) illustrate site-specific proposed wilderness management actions.

Any ground disturbing activities involved with the following actions would follow the Best Management Practices outlined in the BLM Interim Management Guidelines regarding migratory birds.

Objective	Preserve the primeval character and influence of the wilderness areas by managing for the integrity of an indigenous Great Basin ecosystem, including generally reducing non-native plants in favor of native plants.

Noxious and Non-Native Invasive Weeds

The management ideal is to sustain only native species in wilderness areas. Invasive weeds include both broadleaf and grass species. The invasive annual cheatgrass is present in the three wilderness areas and may require different management techniques than other

noxious and invasive weeds. Seeding and transplant projects will follow guidelines presented in the Emergency Stabilization and Rehabilitation section (See Page 28).

Noxious weeds in Nevada are classified by the Nevada Department of Agriculture and the Plant Protection Act (2000) administered by the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). Dalmation toadflax (*Linaria dalmatica*) is the only noxious weed documented within wilderness. When noxious and invasive weeds are found, emphasis would be placed on controlling small infestations and weeds with the potential to spread and displace native plants. Treatments for large infestations (defined by the BLM Ely District Weeds Coordinator), would be considered separately. BLM Ely District weed management protocols would guide the use of herbicide treatments. Treatments may be prioritized in the following order, though it is likely that treatment combinations would be necessary in some situations:

1. Manual removal with hand tools if weeds could be controlled or eradicated without causing re-sprouting, without soil disturbance leading to expansion of noxious or invasive species, and where infestations are of a size manageable by hand crews.

2. Herbicides applied by backpack and pack stock equipment, where manual removal is not effective.

3. Biological control agents approved by the Animal and Plant Health Inspection Service where infestations are of such size that eradication by manual removal or herbicides is not feasible. Current examples consist of a stem-boring weevil for Dalmatian toadflax and a leaf beetle for tamarisk control.

4. Herbicides applied aerially or with motorized equipment, where control is feasible, where control impacts are quickly and readily rehabilitated and where the infestation is of such size that herbicide cannot be effectively applied without motorized equipment.

5. Reseeding treated areas preferably with native species of local genetic stock following guidelines outlined under the Emergency Stabilization and Rehabilitation heading (See Page 28).

6. Alternative treatments, such as targeted grazing by livestock, would be considered.

Site-Specific Proposed Action

An infestation of Dalmatian toadflax (*Linaria dalmatica*) covers approximately 3,100 square feet at 2 to 25 percent cover near the southeastern boundary of the Parsnip Peak Wilderness at UTM coordinates 739633.8910, 4216790.9745 Zone 11 (in T. 2N, R. 69E, Sec. 5). Dalmatian toadflax is a listed Nevada noxious weed and highly invasive. As an opportunistic species, infestations of Dalmatian toadflax are prone to increase rapidly following a wildfire disturbance, as seen around the Pioche area. Since these wilderness

areas are identified as wildland fire use areas in which wildfires are permitted to burn naturally, controlling and eradicating the current small infestations of Dalmatian toadflax is critical to preventing a massive infestation in the future.

Hand pulling of individual Dalmatian toadflax plants in this infestation would occur followed by treatment once a year in the fall with a backpack sprayer spot foliar method with the herbicide Picloram at a rate of four pints per acre. Picloram is approved for use on BLM lands through the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic Environmental Impact Statement (EIS) (September 2007). All appropriate Pesticide Use Proposals would be signed and in place before treatment begins. All herbicide label and Material Safety Data Sheets instructions would be strictly followed. No herbicides would be mixed nor would any herbicide containers be rinsed on site. All herbicide applications would be made by a certified Nevada Pesticide Applicator or someone who is closely supervised by one. The required chemical spill containment and clean up kits would be on site during treatment. A Pesticide Application Record would be completed for each treatment and turned into the Noxious and Invasive Weeds Specialist for the Ely Field Office. The treatments would continue until the infestation is completely eradicated, and the site would be monitored for at least five years after that time.

Vegetation Restoration and Fuels Management

The objective of vegetation restoration and fuels management projects would be to foster indigenous vegetation community resilience and to restore wilderness ecosystem function. This would be accomplished by addressing issues that challenge Great Basin ecosystem integrity, such as the expansion of pinyon-juniper trees and the establishment of invasive species such as cheatgrass, and by addressing natural and anthropogenic changes that affect community ecology, such as fire suppression.

Projects with objectives that fall within the bounds of maintaining or improving wilderness character would be considered. Proposals would be accepted and projects such as the following could be approved:

Restoration Management: Proposals would be accepted to restore native vegetative communities that are unique within these wilderness areas, including seral aspen and ponderosa pine. Restoration projects could also attempt to enhance the resilience of impaired vegetation communities. Projects could include the thinning of conifers in seral aspen, or pinyon and juniper in ponderosa pine. Temporary structures, such as exclosure fences, could be permitted when their presence would contribute to the long-term enhancement of wilderness character.

Fuels Management: Wildland fire, prescribed burning, and manual techniques could be approved for fuels management and may be implemented when the objective is to retain the primeval character of the environment and allow ecological processes to function properly. Where the use of natural fire does not meet management objectives, prescribed

burning may be approved according to BLM wilderness policy on a case-by-case basis for the following purpose:

To restore or maintain the natural condition of a fire-dependent ecosystem.
To restore fire where past strict fire control measures have interfered with natural, ecological processes.
Where a primary value of a given wilderness area will be perpetuated as a result of the burning.
Where it will perpetuate a threatened or endangered species.

Aspen Stand in the Fortification Range Wilderness

Objective	Manage wildlife habitat and wild horses to provide for healthy, viable, and naturally distributed wildlife populations with the least amount of action necessary.

Wildlife Management Activities

Over the life of this plan it may be necessary to implement wildlife management activities to prevent degradation or enhance wilderness characteristics by promoting healthy, viable and more naturally distributed wildlife populations. Wildlife management

activities within these designated wilderness areas would be conducted in conformance with the BLM–NDOW MOU and guided by LCCRDA (2004), which may include the occasional and temporary use of motorized vehicles or mechanized tools.

Wildlife Relocation

Wildlife transplants (i.e. removal, augmentation, or reintroduction of wildlife species) may be permitted if judged necessary to perpetuate or recover a threatened or endangered species or to restore populations of indigenous species eliminated or reduced by human disturbance. Locations outside of wilderness boundaries would be utilized first, and if not available, would be implemented in a manner compatible with wilderness characteristics. Transplant projects, including monitoring, require advance written approval from the BLM if the action involves ground-disturbing activities, motorized methods, and/or temporary holding and handling facilities. Release of wildlife on public lands would be in conformance with BLM Manual 1745 (Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife and Plants, 1992) and the BLM–NDOW MOU. The BLM would provide comment to NDOW on all releases near these wilderness areas.

If motorized or mechanized means are authorized staging would occur outside the wilderness boundary. When feasible, project implementation would occur during periods when visitor use is low (for example, weekdays). In order to inform visitors of impending activity, relocation dates would be posted on the BLM website two weeks in advance.

Wildlife Water Developments

No wildlife water developments currently exist in these wilderness areas. However, LCCRDA (2004) permits the establishment of wildlife water developments when considered essential to preserve, enhance, or prevent degradation of wilderness character. Developments must have minimal visual impact and require site-specific National Environmental Policy Act (NEPA) analysis. The following criteria would be used to identify wildlife water developments:

- To mitigate for loss of natural water sources.
- To mitigate for habitat loss or habitat fragmentation.
- To reduce inter-specific competition between wildlife, livestock, and horses.
- To reduce inter-specific competition between wildlife species
- In suitable wildlife habitat that is water limited.

Wildlife Damage Management

To maintain the areas' natural character, wildlife damage management may be necessary to protect federally listed, declining, and reintroduced indigenous wildlife species; to prevent transmission of diseases or parasites affecting other wildlife and humans; or to prevent serious loss of livestock. Wildlife damage management is only conducted at the request of federal, state, or local agencies, and private organizations or individuals.

Activities would use the minimum amount of control necessary to resolve wildlife damage problems. Acceptable control measures include lethal and non-lethal methods, however, toxicants and M-44 devices (sodium cyanide) are prohibited. Activities will be conducted on foot and may include the use of stock. Use of motorized vehicles, motorized equipment, and/or mechanical transport must be approved by the BLM on a case-by-case basis. The BLM and USDA─APHIS Wildlife Services will create an annual work plan for wildlife damage management; however, APHIS is not required to notify the BLM of activities occurring within wilderness. Activities will be conducted in conformance with the BLM─APHIS MOU (1995) and BLM Manual 8560 (Management of Designated Wilderness).

Herd Management Areas

Activity plans designed for the management of wild horses and manage burros is administered by the BLM Wild Horse Burro Specialist. Wild horse management would seek to conform to Appropriate Management Level (AML) for the Wilson Creek Herd Management Area (HMA). If the Minimum Requirements Decision Guide (MRDG) results in motorized means for management, aircraft, including helicopters, may be used to survey, capture, transplant, monitor, and provide water for wild horses. However, aircraft may not land inside wilderness boundaries except in cases of emergency or by approval from the Ely District Manager. Otherwise on-the-ground horse management activities would be accomplished on foot or by the use of pack stock. In cases where impacts to springs and riparian systems result from wild horses, mitigation measures may be employed to prevent further degradation or to restore wilderness character.

Wild Horses in the White Rock Range Wilderness

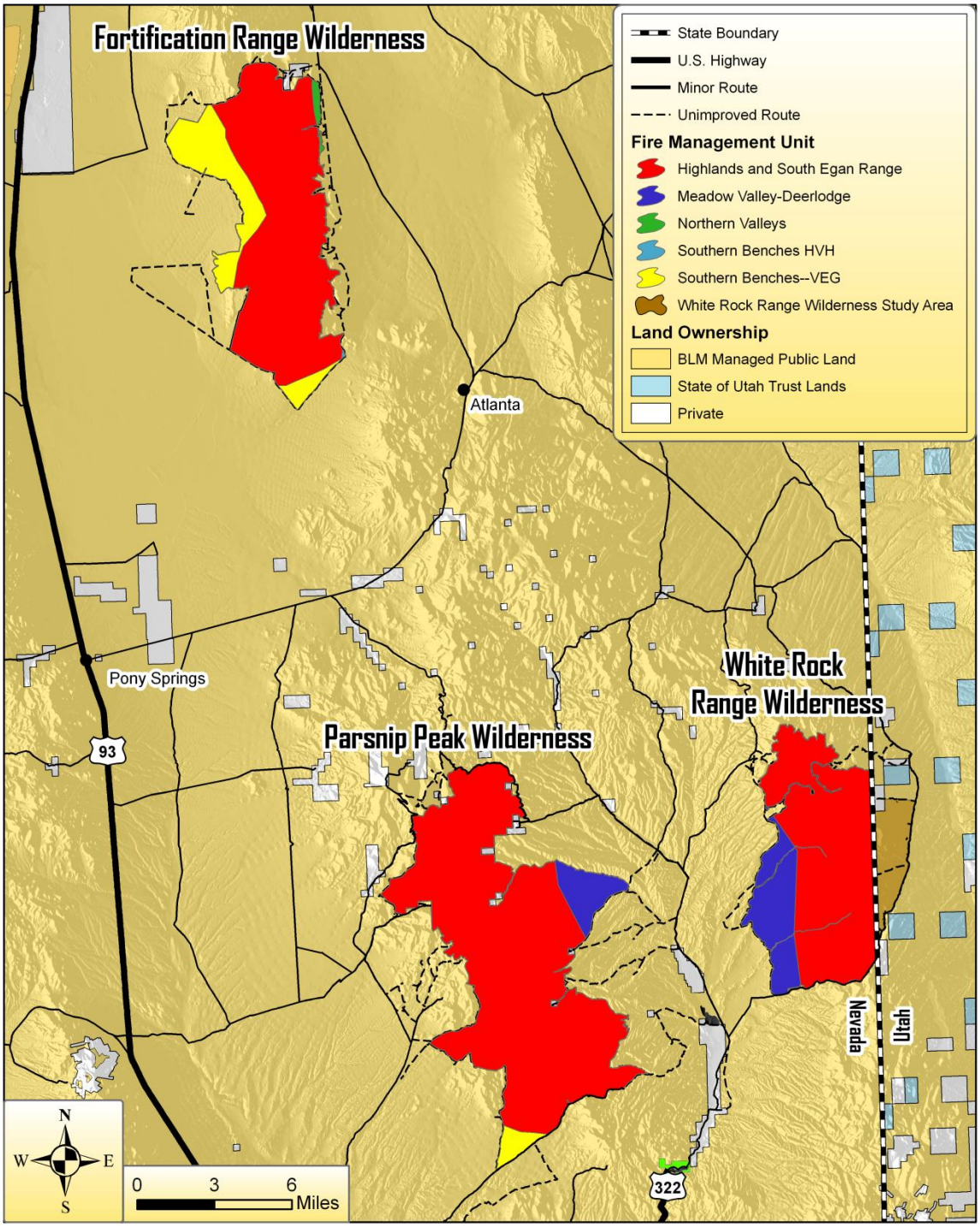
Objective	Preserve the primeval character and influence of the wilderness by allowing fire as a natural process of disturbance and succession where the ecosystem is fire-dependent; manage fire where it threatens wilderness character and/or natural ecological conditions or processes; prevent fire where it threatens human life or property.

Fire Management

Fire management objectives in the wilderness areas would be structured in accordance with the 2004 Ely District Fire Management Plan (FMP). According to this FMP, the three wilderness areas are within Fire Management Units (FMUs) that utilize natural wildland fire to achieve resource management objectives and thus the preservation of wilderness character. The use of wildland fire would be limited along the Utah border in the White Rock Range Wilderness due to Utah fire management objectives. WMP Map 5 (See Page 27) displays the FMUs associated with these wilderness areas. The majority of each area is characterized by Fire Regime Condition Class (FRCC) 3, which means that an area's fire regime has been significantly altered. An FRCC rating is the degree of departure from the historical fire regime, or in other words; fire frequency and severity.

Appropriate Management Responses (AMRs) would be developed following the initial report for wildland fires in the planning area and would include a range of specific actions including monitoring, confinement, initial attack and suppression/extinguishment, or wildfire suppression with multiple strategies. AMR would be determined for each wildland fire based on site factors, including fuel loading and fire behavior, protection of natural and cultural resources, and the circumstances under which a fire occurs, while ensuring the safety of firefighter, the public, and protection of private property. Wildfire management priorities include maintaining native vegetation diversity by managing fire size to minimize the spread and density of noxious or invasive weeds, such as cheatgrass. Minimum Impact Suppression Tactics (MIST) guidelines would be followed in an effort to minimize impacts to wilderness character. Any actions deemed necessary by the Incident Commander for public and firefighter safety would be authorized.

WMP Map 5: Current Fire Management Units Within Wilderness



Fire Suppression Guidelines

If the AMR dictates the use of fire suppression, minimum cost and consistency with resource objectives will be considered. The following points would guide suppression within wilderness:

- A Wilderness Specialist would be dispatched to all fires occurring in or threatening a wilderness area.
- Use of any motorized equipment, including heavy machinery such as bulldozers, would be considered for approval by the District Manager in cases where the fire is threatening human life, property, or wilderness characteristics.
- Helibases and helispots would be located outside of wilderness boundaries. When this is not feasible, the District Manager may approve sites within wilderness that require minimal clearing of natural vegetation.
- Staging areas and fire camps requiring motorized access would be located outside of wilderness unless authorized by the District Manager.
- Staging areas and fire camps that only require non-motorized access may be located in wilderness areas if authorized by the Wilderness Resource Advisor.
- Sling loading materials into or out of wilderness using a helicopter must be approved by the District Manager.
- Helicopters or other aircraft may be used for aerial reconnaissance work.
- The Ely District Office Noxious Weed Prevention Schedule, which identifies best management practices, would be utilized. Suppression equipment would be inspected and washed to prevent the spread of noxious weeds. Wash-down sites would be recorded using a GPS unit, if possible, and reported to the Ely District Office Weeds Coordinator. Camps and other assembly points would not be located in noxious weed infestation areas.
- Use of retardant must be approved by the District Manager; if retardant is not approved, water may be dropped from retardant aircraft as ordered by the Incident Commander without additional authorization.
- All fire suppression activities in wilderness would use MIST unless a higher degree or level of fire suppression is required.
- Leave No Trace principles would be used in wilderness areas. All evidence of human activity would be removed or rehabilitated to the maximum extent possible.

Emergency Stabilization and Rehabilitation

The purpose of emergency stabilization is to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from fire. The purpose of rehabilitation is to emulate historical or pre-fire ecosystem structure, function, diversity, and dynamics consistent with approved land management plans, or to restore or establish a healthy, stable ecosystem in which native species are well represented (Department of Interior, 2004).

For the purpose of this Plan, "reclamation" refers to both emergency stabilization and rehabilitation. Any reclamation projects in non-emergency situations would require District Manager approval, site-specific NEPA analysis, and, if feasible, would avoid times of high visitor use such as weekends, holidays, and hunting seasons. If any motorized vehicle access is authorized to meet the Minimum Requirements Decision Guide (MRDG), routes and evidence of human activity would be removed or rehabilitated to the maximum extent possible upon completion of the reclamation work.

Should seeding be required, the use of native species, particularly of local genetic stock, would be preferred to the use of naturalized species. However, in some areas of the Great Basin ecoregion, cheatgrass rapidly outcompetes native grasses leading to large infestations (Hobbs and Humphries, 1995). Although the BLM Wilderness Manual (8560) does not explicitly permit the use of non-native species for seeding projects in wilderness areas, the Wilderness Act Section 2(a) (1964) states that wilderness areas are "lands designated for preservation and protection in their natural condition." Substantial literature demonstrates that in certain circumstances native seed mixes that include non-native, non-invasive species facilitate long term decreases in cheatgrass establishment through "assisted succession;" in essence creating an "ecological bridge" leading to the stable establishment of native grasses (Waldron et al.2005; Cox and Anderson 2004; Wilson 1989; Redente and DeDuit 1988). Seeding projects of non-native, non-invasive species would be followed by a secondary seeding of native, preferably of local genetic stock, seed mixes. Additional information is presented in Appendix 2. While these seeding projects would potentially compromise wilderness character in the short-term, increased reclamation success would lead to the long term preservation of wilderness character. If other methods to control or eradicate noxious and invasive weeds were developed over the life of this Plan they would be considered.

Objective	Protect and preserve the outstanding archaeological and historic resources of these areas while allowing for visitor enjoyment of those resources.

Archaeological Resources and Historic Properties

For protection and enhancement of archaeological resources, vegetation may be cut back or removed up to several feet from a resource or property to protect sensitive resources, such as prehistoric rock art, from wildland fire. This would be accomplished using tools such as pruning shears, pulaskis or other hand tools once annually in the spring, before fire season, and would be completed by trained cultural site stewards during routine monitoring visits.

Protection of archaeological resources from damage by wilderness visitors would be accomplished with the minimum necessary on-the-ground action. Resources would be monitored but not specifically identified for the public. If monitoring reveals that damage is occurring to archaeological resources, the BLM Ely District Wilderness Planner and Archaeologist would work together to develop a management strategy for preventing

further damage, which may include, but is not limited to education, signage and natural barriers. If inventory/monitoring reveals damage is occurring to archaeological resources due to proximity to cherry-stemmed or access routes, emergency closure of that route would be considered.

Every attempt would be made for protection of artifacts in place. If artifacts are discovered in designated trails, foot-worn hiking paths or other areas of recreational use, they may be collected after consultation with the State Historic Preservation Office according to the standard process followed by the Ely District Archaeologist, as well as the Ely District Archaeologist and Wilderness Planner.

Additionally, a reconnaissance inventory for archaeological resources would be completed at natural springs in proximity to or within wilderness and along access and cherry-stem routes in an effort to inform management of decisions for the protection of these resources.

Objective	Provide for the use and enjoyment of the wilderness and outstanding opportunities for primitive recreation in such a way that protects natural conditions with minimal on-the-ground developments and minimal regulation of visitor activities.

Trails

Designated trails would be marked on the ground at trailheads and/or staging areas and displayed on BLM recreation and wilderness maps. A cultural resource inventory of all designated trails would be completed. Foot-worn hiking paths may occur and may be available for use upon discovery by visitors. These informal foot-worn hiking paths would not be marked on the ground, displayed on BLM maps or brochures, or routinely receive maintenance.

Monitoring for new foot-worn hiking paths would specifically occur in high use areas, at all vehicle access points, and around former vehicle routes. An inventory of new foot-worn hiking paths would be maintained and monitored for resource damage. Monitoring would identify paths with different levels of trampling, leading to primitive camping areas, cut vegetation, or other evidence of use.

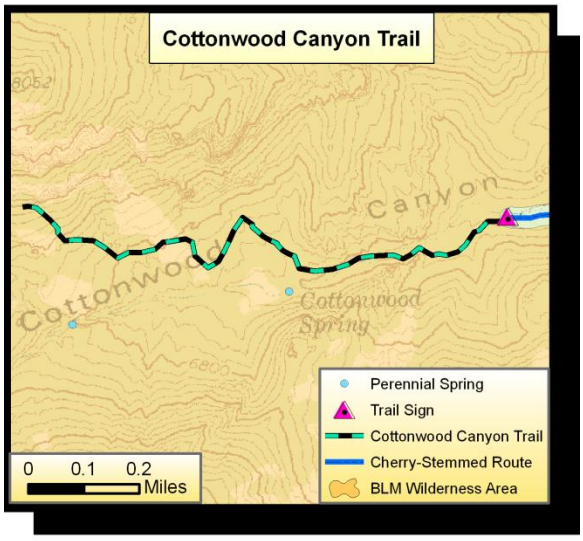
As new foot-worn paths are discovered, they would be evaluated for impacts to wilderness character (including archaeological and biological resources) and the management objectives of this Plan. When appropriate and where possible, new foot-worn hiking paths would be rehabilitated or retained (see Trail Guidelines, Page 31). When a foot-worn hiking path is retained, it may be rerouted, improved, or maintained to follow designated trail guidelines as outlined below to make the trail compatible with protecting resources while preserving the wilderness character. If not designated as a trail, or retained as a foot-worn hiking path, new trails would be rehabilitated.

Trail Guidelines: Both designated trails and, when determined appropriate, informal foot-worn paths may be maintained or rerouted where they are causing or anticipated to cause damage to wilderness character. Examples for when trail maintenance or rerouting would occur include:

- Slopes greater than 15 percent, beyond which potential for excessive soil erosion and trail deterioration is high. Very short, steep sections may be retained where reinforcement with native rock would prevent soil erosion. Rolling dips or rock-enforced water bars would be utilized to reduce water caused soil erosion.
- Where trail braiding or duplicate routes exist or are beginning to occur, the most appropriate trail would be selected by improving its tread surface or trimming back vegetation. The alternate trail(s) would be obstructed and rehabilitated with rock or native vegetation.
- Maintenance would strive to limit trail width to 24 inches, but not exceed 36 inches except for trail sections along precipices (where it may be wider for safety and horse use) or in washes. Width standards are applied to continuous segments longer than 50 feet. Tree limbs or fallen trees may be cleared within ten feet high and four feet to either side of trail (cutting limbs at trunk) or, where practical, minor trail relocation to avoid the tree.
- Trails may be rerouted to avoid damage to natural or cultural resources.

Site-Specific Proposed Action

The Cottonwood Canyon Trail in the Fortification Range Wilderness would be designated as a hiking and equestrian trail to accommodate the high visitor use levels in that area. The trail would begin and be marked on the ground at the end of the cherry stemmed-route. The trail would be approximately one mile in length and would be located predominantly on an existing wild horse and/or livestock trail. Some small changes may be made to this existing trail in order to meet the listed standards on the following page for trail guidelines and to avoid potential issues in the Cottonwood Spring riparian area (See WMP Map 8 Page 47).



General Recreation Activities

A variety of primitive and unconfined types of recreational activities are likely to occur in all three wilderness areas. Management actions that may be initiated in response to recreational impacts include, but are not limited to:

- Public outreach and education in Leave No Trace principles to encourage minimum impact practices.
- Provide information to the public on non-wilderness recreational opportunities in the region.
- Establish protective areas around sensitive resources where recreation activities may be restricted.
- Closure of areas to recreation activities.
- Campsite management to maintain use at existing sites and prevent unmanaged site expansion or new site establishment.

Hunting and trapping are permitted in wilderness, subject to applicable State and Federal laws and regulations. Shed antler collection would be permitted for personal use only. These activities are and would likely continue to be popular. The creation or construction of permanent blinds in wilderness areas and wilderness study areas is not allowed (43 CFR 6302.20(f) and IMP Handbook H-8550-1, Chapter I.B.2. and 3.). However, portable or "pop-up" blinds may be temporarily allowed for hunting, photography, wildlife observation and similar purposes for a period of fourteen (14) days if they are packed or carried in and out and do not require the disturbance or destruction of native soil, rock, or vegetation.

Portable and "pop-up" blinds must be attended or occupied at least some portion of a ten day period within the 14 day period of use. If blinds are not attended or occupied for 10 days, they will be considered unattended property and/or permanent structures and will be subject to removal by the BLM (43 CFR 8365.1-2(b)) and subject to disposition under the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 484(m)).

Traditional geocaching and letterboxing would not be allowed, however virtual geocaches would be an accepted activity within wilderness. Traditional geocaches and letterboxes would be removed when encountered, and visitors wishing to participate would be directed to locations outside wilderness.

Recreational horseback riding and use of pack stock animals would be permitted both on and off trail. Other than incidental browsing, riding and pack stock animals may only be fed with packed-in, certified weed-free feed.

According to BLM Wilderness policy, any fuelwood cutting in wilderness would be limited to dead and down material.

Camping

Backcountry camping would be allowed. Occupying a campsite would be allowed for up to 14 days. Should a visitor wish to camp longer than 14 days, their camp must be relocated a minimum of 25 miles from the previous site. If monitoring shows that the 14-day stay limit is leading to unacceptable resource impacts, site stay limits of less than 14 days could be implemented. Campfires would be allowed except under fire hazard

restrictions. Visitors would be allowed to collect dead and down fuelwood for personal campfires during their trip. Leave No Trace camping techniques would be encouraged through literature and BLM-sponsored Leave No Trace public workshops. If more than two campsites (identified by the presence of a campfire rock ring) are identified within a quarter mile of each other, the least impacted site would be restored to a natural condition to minimize additional camping disturbance. Campsites closer than 300 feet to sole water sources would also be removed, in compliance with state regulations.

Objective	Maintain existing opportunities for solitude by managing visitor use patterns if monitoring indicates a need.

Solitude

These wilderness areas currently enjoy outstanding opportunities for solitude, thus numeric standards for frequency of visitor encounters or group size limits would not initially be established. Large groups inquiring about recreational opportunities would first be directed to locations outside of wilderness, while small groups may be directed to locations within wilderness. If this wilderness character of solitude becomes degraded over the life of this Plan, the following management actions, in order of priority, may be initiated:

Solitude in White Rock Range Wilderness

- Educate visitors concerning Leave No Trace recreation ethics to reduce conflict with other visitors.
- Provide information to the public on non-wilderness recreational opportunities in the region.
- Establish a group size limit of 12.
- Increase difficulties of access (reduce maintenance levels on access points and boundary roads, limit available public information, limit parking availability, etc.).
- A combination of the above methods.
- Plan revision with additional public input to reassess these standards and/or implement more direct controls.

Objective	Provide for vehicle access to the boundaries of the wilderness areas while also deterring vehicles from entering into the wilderness areas.

Vehicle Access and Staging Areas

Currently, there are numerous heavily used access points. Access points are defined as locations along wilderness boundaries where focused access occurs. Over time, these and other areas used for parking along boundary roads may be impacted to the point at which improvements should be made in order to protect wilderness character. Vehicle turn-arounds would occupy no more than 0.5 acres each, would not extend into the wilderness, and would be limited to within a 100-foot boundary offset.

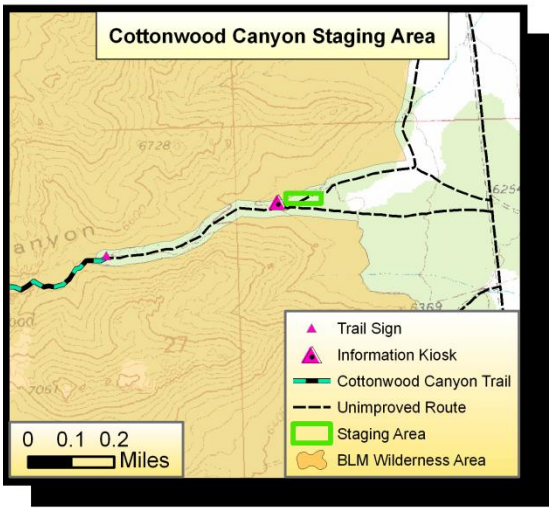
Staging areas would be constructed when necessary to accommodate visitation and protect wilderness character. The area of disturbance would be no more than two acres and would not extend into the wilderness. Vehicle barriers would be constructed outside of wilderness where natural obstacles are not adequate to prevent vehicles from crossing into wilderness. Implemented barriers could include the following:

- Wilderness sign, berm associated with turn-around, small rocks and/or vegetation placement or restoration.
- Large boulders moved by heavy equipment.
- Posts.
- Fence or gates.

Where feasible, roads adjacent to and accessing the wilderness areas, such as cherry-stem and administrative routes, would be maintained in the condition that existed at the time of wilderness designation. Using a trail maintenance approach, the installation of water bars to control the flow of water, as opposed to blading or culvert installation, would be utilized.

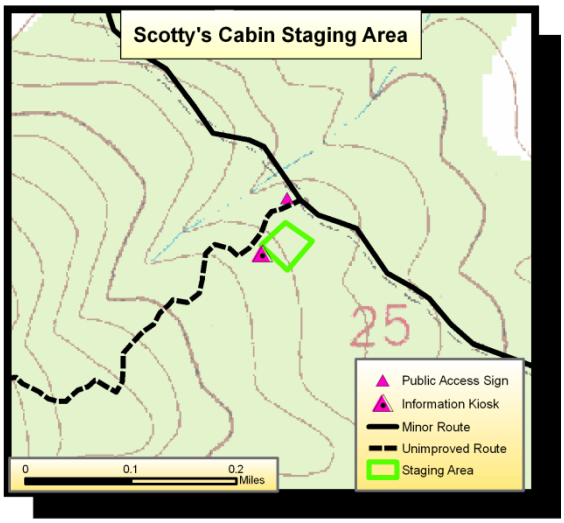
Site-Specific Proposed Action

Staging areas would be designated at the beginning of the Cottonwood Canyon cherry stem in the Fortification Range Wilderness and at the intersection of the main dirt road and the Scotty's Cabin access route of the White Rock Range Wilderness.



The Cottonwood Canyon Staging Area would remain within the 200-foot non-wilderness corridor and would initially be identified by wilderness boundary markers at key locations unless future use necessitates the installation of vehicle

barriers. The staging area would accommodate vehicle turnaround and include installation of an information kiosk.



The existing disturbance at the site of the Scotty's Cabin Staging Area would be improved to facilitate parking and off-highway vehicle (OHV) unloading. The staging area would include a public access sign and a map of the White Rocks Wilderness Area. The staging area would initially be approximately 150 feet by 150 feet, but this size may change over time to accommodate increased use.

The OHV trail accessing Scotty's Cabin is the only feasible public access to the eastern side of the White Rock Range Wilderness. It is used heavily during Nevada's hunting season and moderately during the rest of the year. The existing access route is located on BLM land administered by the Cedar City, Utah Field Office. From the staging area, 0.75 miles of the route was initially created by a bulldozer to be used as a fire line for the Coyote Fire in 2000; it has since been used as an OHV trail to avoid private property and access an existing historical jeep trail to Scotty's Cabin. This access route would be the main access route to the White Rock Range Wilderness and, as with other access routes, would be maintained at the current level of access using a trail maintenance approach.

Also see WMP Map 8 for the Cottonwood Canyon Staging Area and WMP Map 10 for the Scotty's Cabin Staging Area (Pages 47, 49).

Scotty's Cabin area near the White Rock Range Wilderness

Objective	Emphasize education and interpretation to manage visitor activities over regulations.

Environmental Education and Interpretation

General interpretive information regarding natural and cultural resources and recreation opportunities in wilderness would be located on kiosks outside of wilderness, in brochures, on BLM land status and recreation maps, and at the BLM Ely District Office website. Wilderness-specific maps would include wilderness area descriptions, designated trails, interpretive information, as well as wilderness ethics and Leave No Trace principles. There would be no interpretive trails designated.

When feasible the BLM would collaborate with other agencies and non-government organizations in the presentation of basic information. This could include authors of media or guide books.

Public outreach for Leave No Trace recreation ethics would be emphasized using classes and workshops presented at local schools and in the field. A separate wilderness public education plan has been developed for programs related to all designated wilderness in Lincoln County.

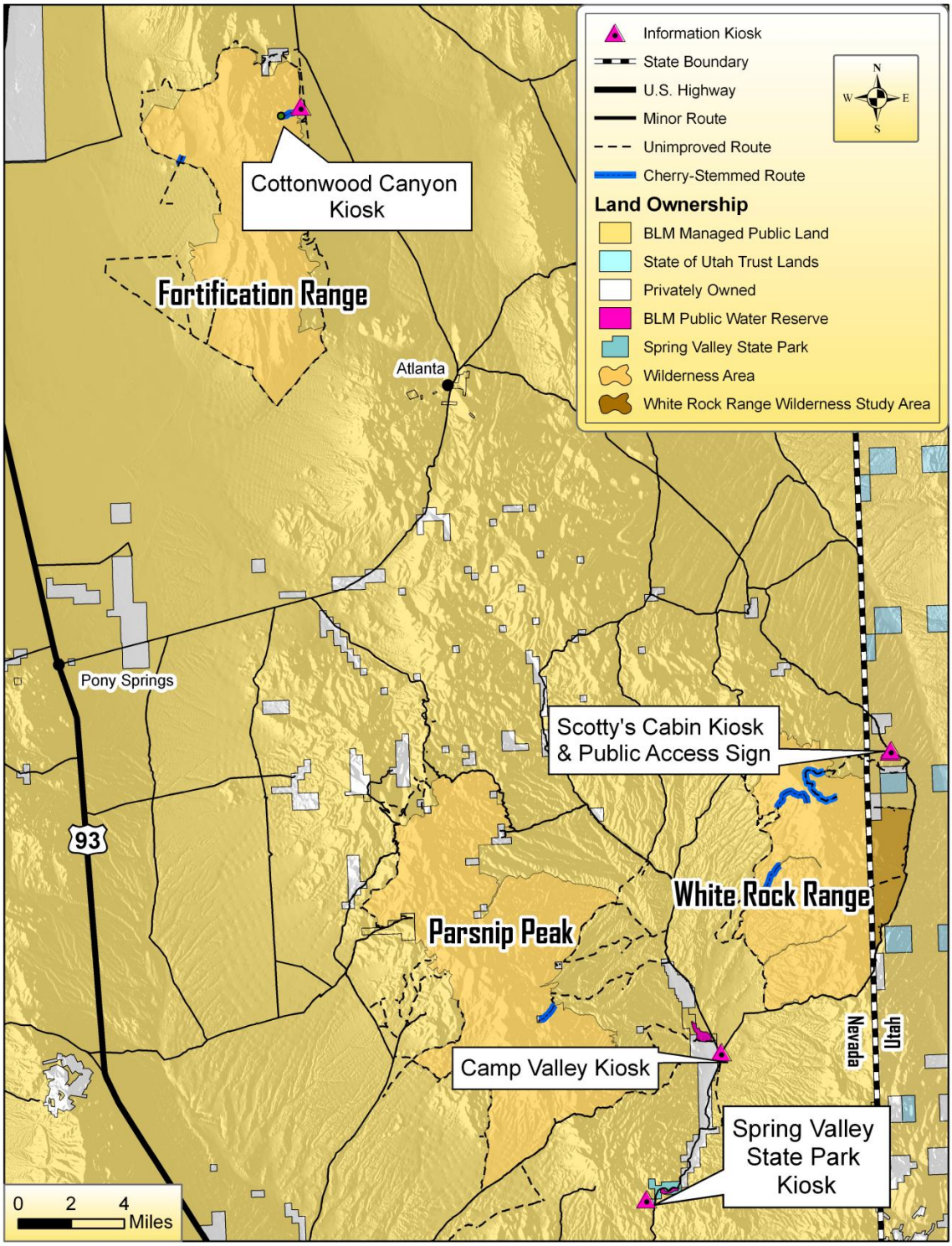
Sign Plan

Wilderness boundaries would be identified by markers at key locations. Informational kiosks would provide wilderness, natural and cultural resource interpretive information, and would include visitor surveys and survey collection boxes. No directional signs would be placed on trails within wilderness. Signs outside of wilderness would not direct visitor use toward sensitive resources and in some cases, may specifically direct visitors away from sensitive resources. Additional kiosks and signs would be installed to adaptively manage for changing needs.

Site-Specific Proposed Action
Kiosks would be installed at the Cottonwood Canyon Staging Area of the Fortification Range Wilderness, the Scotty's Cabin Staging Area of the White Rock Range Wilderness and along the road through Camp Valley between the Parsnip Peak and White Rock Range Wilderness Areas. Information regarding wilderness in Lincoln County, with specific focus on the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas, would be displayed on a large kiosk at Spring Valley State Park. A sign indicating public access to the White Rock Range Wilderness would be installed at the intersection of the main dirt road and the access route to Scotty's Cabin. See WMP Maps 6, 8 & 10 for kiosk and sign locations (Pages 38, 47 & 49). A trailhead sign would be installed at the end of the cherry stem at the start of Cottonwood Canyon trail.

Fortification Wilderness Boundary Marker

WMP Map 6: Kiosk and Sign Locations



Research

Research proposals investigating indigenous plant communities, wildlife, archaeological resources, and the human dimensions of wilderness would be considered. Proposals must contribute to the enhancement of wilderness character or the improvement of wilderness management. All proposals would be subject to the restrictions and guidelines of the Wilderness Act (1964), LCCRDA (2004), the BLM-NDOW MOU, as well as appropriate guidelines outlined in this Wilderness Management Plan.

Research proposals that do not contribute to the improved management of the area as wilderness would not be permitted if they can be accomplished outside of the wilderness areas and/or they cannot be conducted in a manner compatible with the preservation of the wilderness environment.

Research and other studies must be conducted without use of motorized or mechanized equipment or construction of temporary or permanent structures. Exceptions may be approved for projects that are essential to managing the specific wilderness areas when no other feasible alternatives exist. Such use must be necessary to meet the Minimum Requirements Decision Guide (MRDG) for administration of the area as wilderness and must not degrade wilderness character. A site-specific NEPA analysis would have to be prepared for the authorization of any exceptions.

Objective	Allow for special provision land uses determined by the Wilderness Act or Lincoln County Conservation, Recreation and Development Act while minimizing developments, degradation to naturalness, and other impacts to wilderness resources.

Livestock Grazing

Grazing would continue under federal regulations to meet the Mojave ─ Southern Great Basin Resource Advisory Council Standards. Planning related to grazing operations would be guided by the Congressional Grazing Guidelines (House Report 105-405 Appendix A, 1990) and the BLM Manual 8560 (Management of Designated Wilderness Areas).

Activities and the necessary facilities used to support livestock grazing would be permitted to continue in wilderness. The following excerpt from the Congressional Grazing Guidelines provides direction for facilities maintenance and use of motorized equipment in wilderness:

"The maintenance of supporting facilities, existing in an area prior to its classification as wilderness (including fences, line cabins, water wells and lines, stock tanks, etc.) is permissible in wilderness. Where practical alternatives do not exist, maintenance or

other activities may be accomplished through the occasional use of motorized equipment….Such occasional use of motorized equipment should be expressly authorized in the grazing permits for the area involved. The use of motorized equipment should be based on a rule of practical necessity and reasonableness….Moreover, under the rule of reasonableness, occasional use of motorized equipment should be permitted where practical alternatives are not available and such use would not have a significant adverse impact to the natural environment. Such motorized equipment uses will normally only be permitted in those portions of a wilderness area where they had occurred prior to the area's designation as wilderness or are established by prior agreement."

Current known range developments, as well as any range developments discovered may be kept and maintained. Developments would be removed if deemed unnecessary by the BLM and permittee following periodic evaluations or when there is a grazing permit renewal or transfer. The installation of new range developments is allowed in accordance with the Congressional Grazing Guidelines and pending project-specific NEPA analysis.

Range developments that appear to have been abandoned would receive an administrative record review and additional field reconnaissance in order to determine usage. The relevant BLM rangeland management specialist and archaeologist would be consulted to determine if historical or cultural designation is warranted. If it is determined, after consultation with the permittee, that a development is abandoned and not of historical or cultural value, it would be removed by BLM personnel or authorized volunteers. Range developments for which questions of activity exist would be evaluated during the livestock operators' term permit renewal process.

Routine livestock management activities and maintenance of supporting facilities (e.g. small salt drops and fence repairs) would be accomplished by foot or horseback as needed. Motorized vehicles may be authorized for major maintenance when transporting equipment or parts which cannot be accomplished by foot or pack stock. Specific maintenance requirements and schedules would be established by the permittee, range specialist, and wilderness specialist during permit renewal and would be stated as a term or condition of the grazing permit.

Approved motorized access would be confined to established administrative access routes. These would be managed for limited use by the permittee. A gate or bollard, signed as administrative access, could be installed at the start of select administrative access routes to prevent unauthorized vehicle use. The permittees and BLM staff would maintain access keys. Administrative access routes would not be decommissioned; they may be maintained on a case-by-case basis in order to provide reasonable access for permittees.

In the case of an emergency such as rescuing sick animals or placement of feed, the permittee would be authorized to use motor vehicles in addition to their scheduled range development maintenance and livestock management access provided the permittee notifies the BLM at the onset of the emergency or immediately thereafter. This would be stated as a term or condition of the grazing permit.

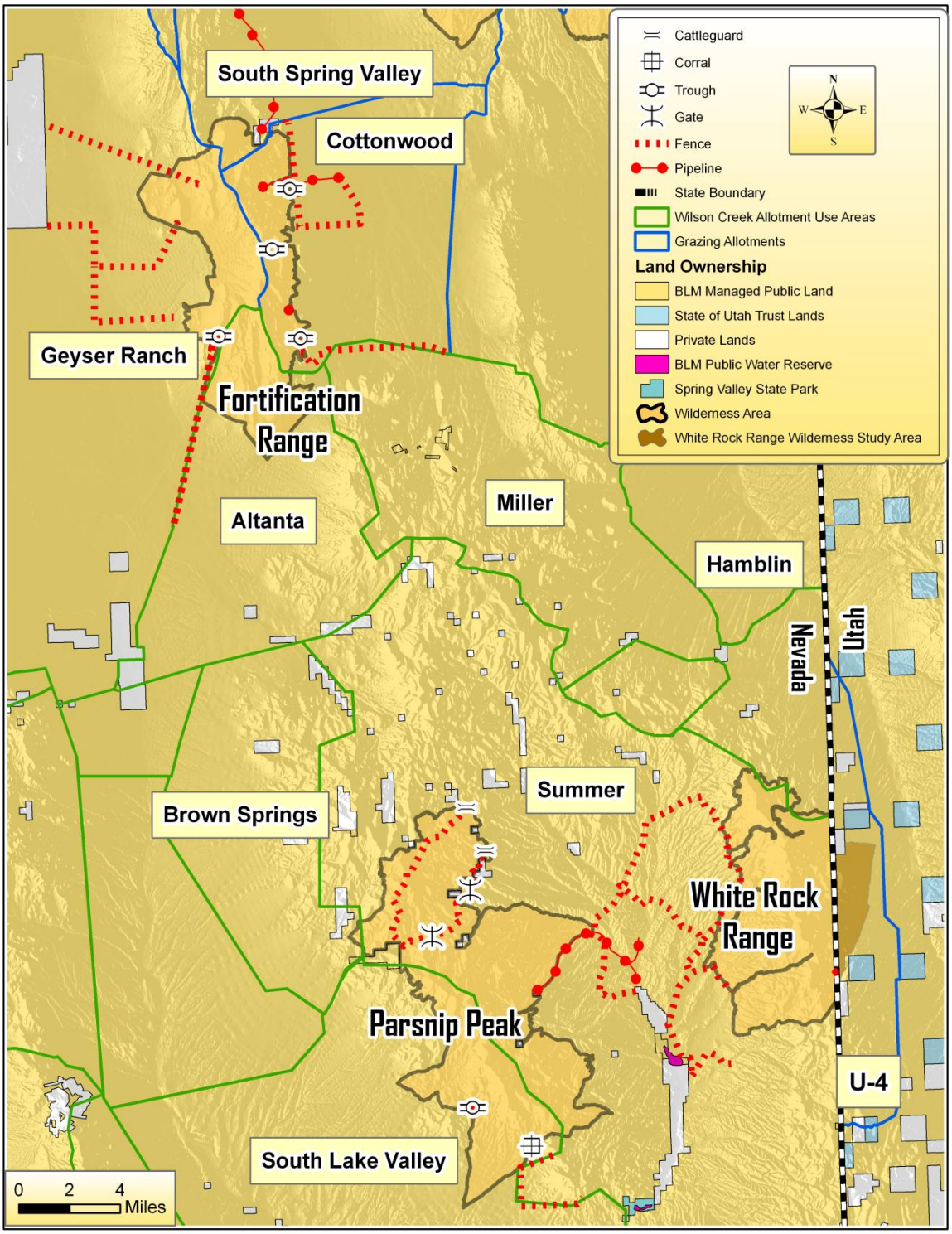
Site-Specific Proposed Actions

The 15 known range developments would be kept and maintained. WMP Maps 2─4 and 7 (See Pages 7─9, 42) show existing range developments in the wilderness areas. Routine activities and facilities maintenance in association with these developments would be performed by foot or horseback. Motorized vehicles may be authorized for major maintenance when transporting equipment or parts which cannot be accomplished by foot or pack stock.

Five administrative access routes would be permitted and managed for use by the permittee on a limited basis. WMP Table 1 (Page 43) and WMP Maps 8─9 (Pages 47─48) describe and depict administrative access routes and their associated access need (i.e. range development maintenance and salt drop). The approved administrative access routes would be located in existing former vehicle routes; these routes would not be decommissioned and may be maintained on a case-by-case basis in order to provide reasonable access for permittees. Motorized access would be confined to these established administrative access routes.

Range Development in the Parsnip Peak Wilderness

WMP Map 7: Existing Grazing Allotments and Range Developments



WMP Table 1. Proposed Administrative Access Routes.

Wilderness	Allotment	Use Area	Administrative Access Type	Access Need	Access Location
Fortification Range	Wilson Creek	Atlanta	Route	Salt Drop	T. 07N, R. 67E, Sec. 22.
Fortification Range	Cottonwood	-	Route	Range Development Maintenance	T. 08N, R. 67E, Sec. 3.
Fortification Range	Geyser Ranch	-	Route	Range Development Maintenance (Spring)	T. 08N, R. 67E, Sec. 29.
Parsnip Peak	Wilson Creek	Summer	Route	Salt Drop	T. 04N, R. 68E, Sec. 12.
Parsnip Peak	Wilson Creek	Summer	Route	Range Development Maintenance	T. 05N, R. 68E, Sec. 35.

Objective	Maintain or enhance the natural appearance of the wilderness areas by removing unnecessary facilities and minimizing or restoring human-caused surface disturbances.

Rehabilitation of Small-Scale Surface Disturbances

Small-scale surface disturbances include abandoned developments, dispersed campsites, mining claims, and linear disturbances created by motorized vehicle traffic that are largely denuded of vegetation. Rehabilitation seeks to restore disturbances to their natural vegetative condition. Except for designated administrative access, all former vehicle routes, including future incursions, would be decommissioned and rehabilitated. Based on monitoring results repeat rehabilitation treatments may occur. These routes are displayed on WMP Maps 2─4 (See Pages 7─9). Artificial barriers consisting of natural materials may be placed outside of wilderness to facilitate successful long term

rehabilitation. Environmental Assessment NV-040-05-010 (Wilderness Disturbance Reclamation) may be referenced for disturbance reclamation.

Unauthorized Route in the White Rock Range Wilderness

Work would be completed by BLM staff, contractors, and volunteers and would be done outside migratory bird breeding and nesting seasons unless a survey is done and there is no breeding or nesting activity occurring in the vicinity of the projects. All crews would be furnished with maps depicting the wilderness boundaries and would be trained in the use of required tools and equipment as well as awareness of any unique wildlife, plant, cultural, and wilderness resources. All personnel involved would be provided with cultural observation reports prior to reclamation activities. All vehicles would be limited to designated and existing roads outside of designated wilderness. **All actions in wilderness would be conducted with non-motorized equipment and non-mechanized transport.** A few of the following procedures are similar but not directly related to Emergency Stabilization and Rehabilitation procedures and implementation would generally be conducted in the following order:

1. Decompaction: Working the top few inches of the entire disturbed surface to relieve soil compaction. This action would be completed with the use of soil spades, spading forks, McCloud rakes, pulaskis, shovels, horse-drawn implements, etc.

2. Scarifying/Pitting: Loosening and texturizing the impacted, disturbed surface in random locations to better capture water, organic debris, and wind-blown seeds, thereby stimulating natural revegetation.

3. Recontouring: Reconfiguring/shaping involves the creation of small hummocks and banks, where appropriate, to mimic the surrounding landscape. Berms would be pulled in and the soil distributed across the disturbed surface. Vehicle tracks in sandy washes would be raked. This would lessen visual contrasts and provide a surface for natural revegetation.

4. Vertical Mulching: Dead and down vegetation is "planted" to obscure the visible portions of the disturbance and is obtained from adjacent areas. Additional dead vegetation, rock material and other organic matter may be distributed over the worked surface to decrease visual contrasts, create sheltered sites to aid in natural revegetation, and add organic debris.

5. Erosion Control: Placing sterile weed-free straw bales or creating light terracing/berms to reduce erosion and create barriers to vehicles on steep slopes. This is especially effective on hill climbs. The straw bales break down over time and provide additional organic debris to the reclamation site.

6. Vegetative Restoration: This would involve planting, transplanting and/or seeding as necessary to help stabilize soil, speed overall vegetative recovery and camouflage evidence of disturbances. All seed would be locally collected or native species scattered on reclaimed surfaces to accelerate natural revegetation. This action would be completed by non-motorized hand tools.

Rehabilitation locations would be monitored for future unauthorized motorized use and may require repeat treatments.

Entities (e.g. individual, agency or company) creating large surface disturbances, such as those that may be caused by heavy machinery, would be responsible for developing a rehabilitation plan and conducting necessary environmental analysis.

Site-Specific Proposed Action

Currently there are 68 disturbances totaling 30.5 miles which is approximately 30.5 acres of surface disturbance. Based on monitoring results repeat rehabilitation may occur; 27.2 (does not include administrative access routes) miles would be rehabilitated according to the standards and processes described above: 8.4 miles in the Fortification Range Wilderness, 8.0 miles in the Parsnip Peak Wilderness, and 10.8 miles in the White Rock Range Wilderness (See WMP Maps 2─4, Pages 7─9).

Structures, Installations and Other Human Effects or Disturbances

Summit registers would not be removed. Other structures and installations may be removed if they do not meet the MRDG necessary for the administration of the area as wilderness, or if they are not associated with a prior use or valid existing right.

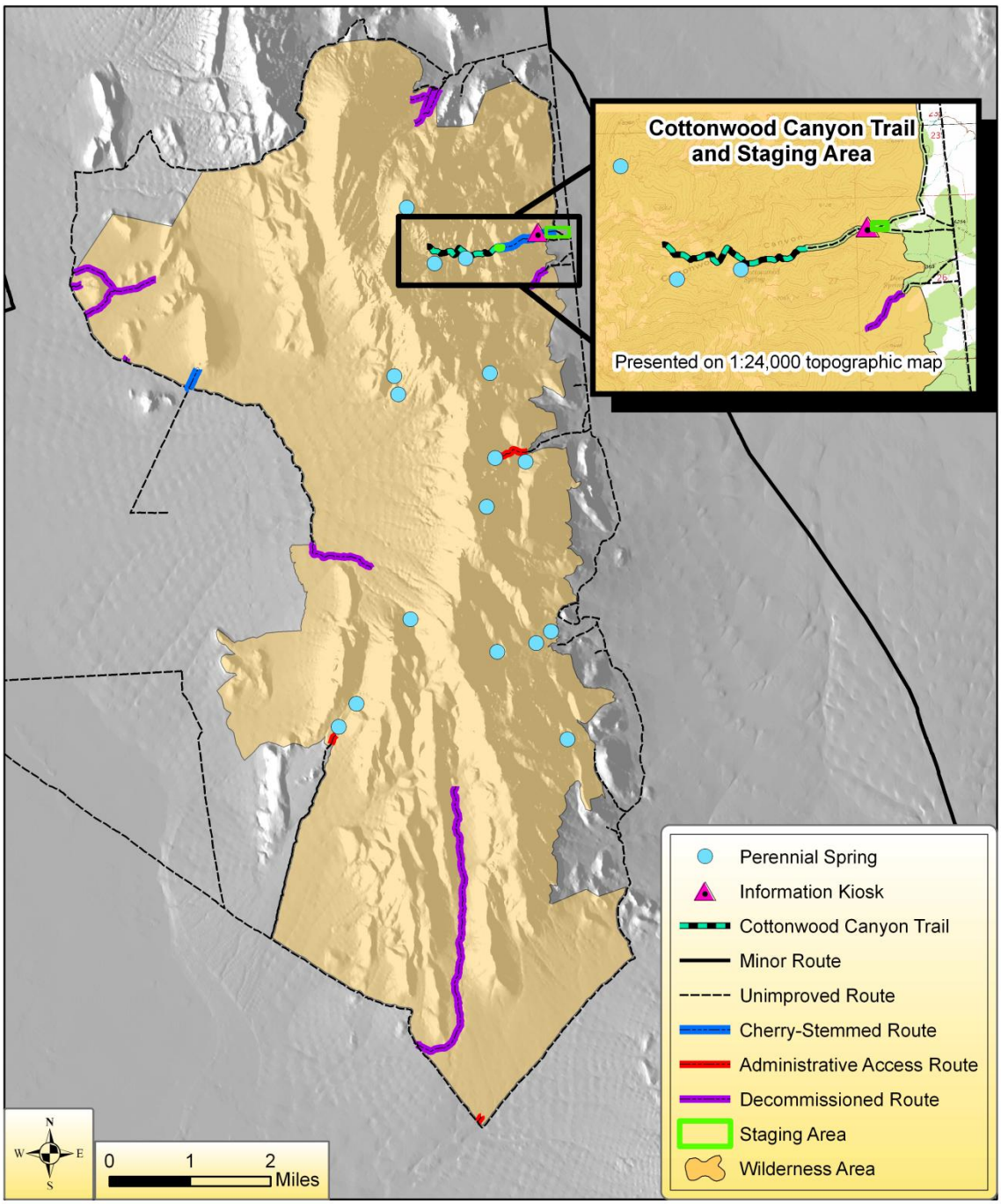
Wilderness staff and volunteer monitors would be given instructions on the identification of human effects that would be considered unattended personal property or refuse.

Unattended personal property not associated with an active camp, including geocaches, would be removed by BLM personnel upon encountering it, and temporarily held at the BLM Ely District Office or Schell Field Office. If possible, the owner of the personal property would be contacted. In the case of a traditional geocache, the BLM would request that it be removed. In the instance that a virtual geocache identifies a sensitive site, the sponsor will be asked to remove the site from the internet. Human effects for which questions of age exist would be photographed for further consideration by the archaeologist. Historic and prehistoric artifacts would not be disturbed unless some disturbance is necessary for preservation of the resource or to promote wilderness character.

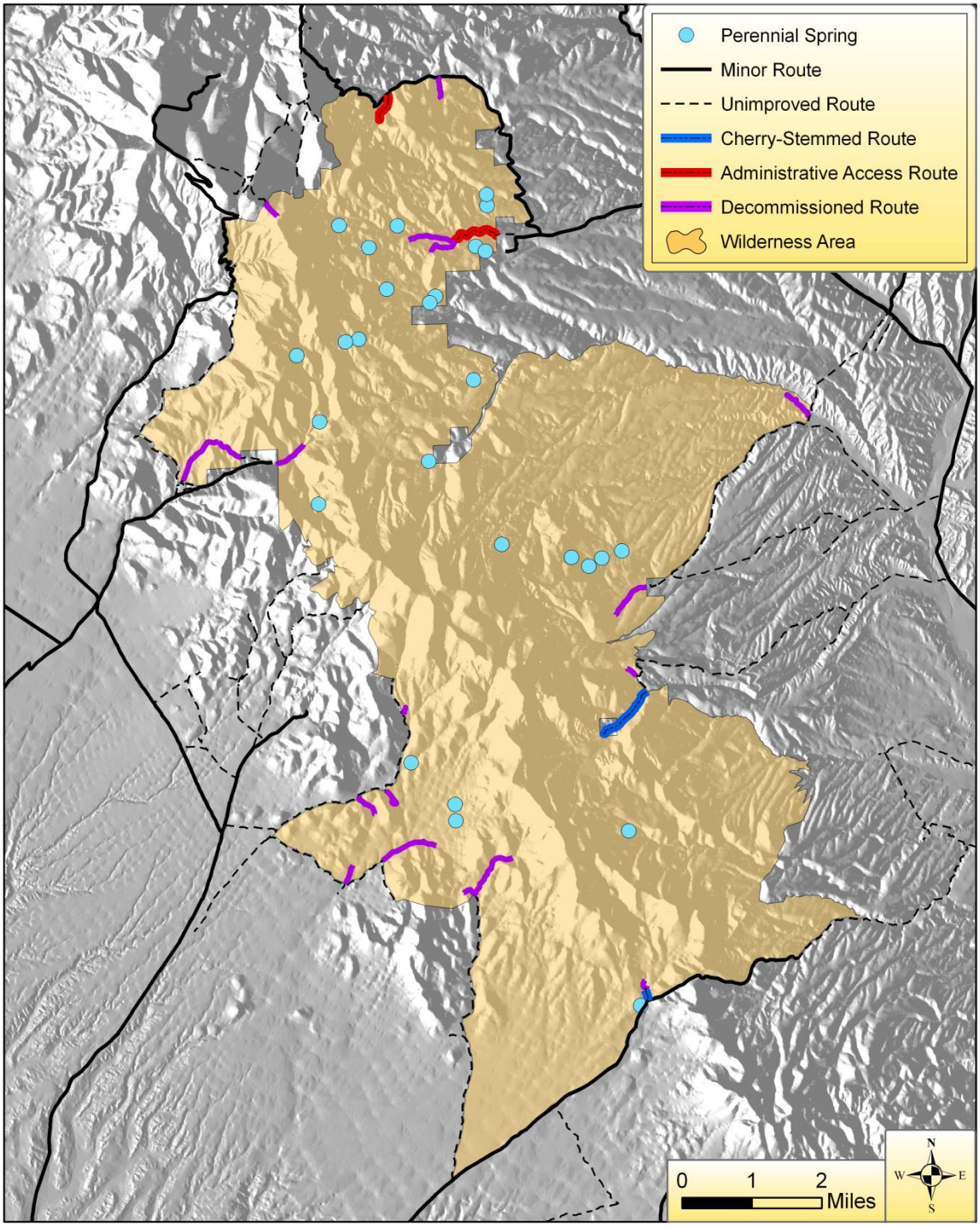
Where mine adits or shafts are found in these wilderness areas, they could be closed in order to promote wilderness character and public safety using conforming actions such as, but not limited to, hand tools and dynamite filling. NEPA and MRDG would be required for non-conforming actions including, but not limited to, bulldozers and bat gates. If mine adits or shafts are proposed for closure, bat surveys would be necessary.

Trash Found in, and Removed From, the White Rock Range Wilderness

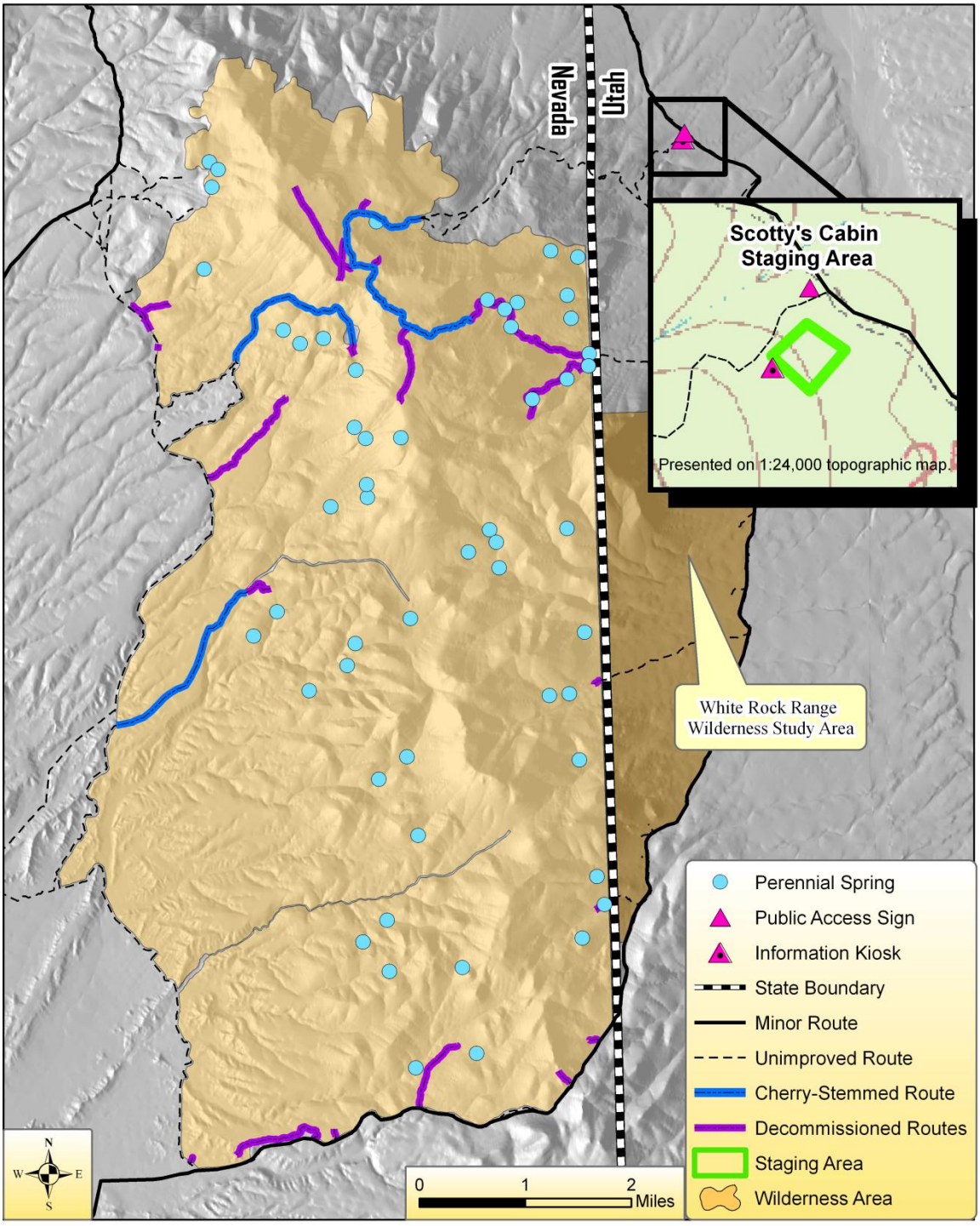
WMP Map 8: Cottonwood Canyon Trail, Staging Area & Administrative Access Routes in Fortification Range Wilderness



WMP Map 9: Administrative Access Routes in Parsnip Peak Wilderness



WMP Map 10: Scotty's Cabin Staging Area in White Rock Range Wilderness



Objective	Assess potential commercial services of the wilderness areas for their economic importance and prevent negative impacts on wilderness characteristics.

Commercial Services Restrictions and Guides and Outfitters

Section 4(c) of the Wilderness Act prohibits commercial enterprises within wilderness, with the exception of those commercial services listed in Section 4(d) of the Wilderness Act (1964). Commercial services, particularly those that are not wilderness-dependent or do not contribute to wilderness character or public education thereof, including for-profit pine nut harvesting, would be prohibited. Conducting these activities for personal use would be allowed. Section 4(d) (6) of the Wilderness Act allows for commercial services to the extent necessary for activities that are suitable for recreational or other wilderness purposes. Commercial guiding would be permitted for:

- Hunting.
- Academically-oriented organizations whose primary purpose is wilderness or environmental education.
- Organizations whose service is primarily for the support of people with disabilities.

Guides would be subject to the same regulations as other visitors to the wilderness areas. Regulations for guides and outfitters would be in conformance with the BLM Ely District Resource Management Plan (RMP), the Wilderness Act (1964), and LCCRDA (2004). Limits on the number of commercial guides may be implemented if monitoring identifies excessive impacts to wilderness character or resources.

Objective	Implement proposed actions as necessary to meet minimum requirements for the administration of the areas as wilderness and to have the least impact to wilderness characteristics.

Military Operations

Military training exercises would not be located within the three wilderness areas. Guidelines for handling military operations would distinguish between non-emergency and emergency situations. Non-emergency incidents might include such activities as the release of flares, the recovery of aircraft parts, or the salvage of non-operational ordinance. Emergency situations may include, but are not limited to, the retrieval of downed aircraft, the rescue of pilots, or the recovery of live ordinance.

Non-emergency military actions **may** be approved on a case-by-case basis following MRDG analysis, environmental assessment, and authorization from the Ely BLM District Manger. The Ely District Office Noxious Weed Prevention Schedule (i.e., equipment

inspection and washing, recording of wash-down sites, notification of the weeds coordinator, and avoidance of noxious weed infestation areas) will be utilized for non-emergency actions, as will Leave-No-Trace principles. All evidence of human activity would be removed to the maximum extent possible.

Emergency military actions involving prohibited uses identified in Section 4(c) of the Wilderness Act (1964) (e.g. motorized vehicles and mechanized equipment, mechanical transport, landing of aircraft etc.) will be permitted within wilderness without prior analysis, assessment, or authorization provided the 99CES/CC (Commander of the Civil Engineering Squadron of the 99th Airbase Wing at Nellis Air Force Base) notifies the Ely BLM District Manager at the onset of the emergency or immediately thereafter.

Water Rights

The BLM would seek to acquire additional water rights within the wilderness areas in accordance with Nevada state water law. Existing water rights may be purchased from willing sellers or shared with other agencies through cooperative agreements. The BLM may also file application for additional water rights where water in excess of existing permitted rights can be shown to exist. Water rights would only be used to sustain riparian habitat, provide water to wildlife, or support recreation. All water rights actions would be in conformance with LCCRDA (2004) and the Nevada Revised Statutes.

Monitoring

Monitoring tracks the outcome of proposed activities on the qualities of wilderness character previously defined (See Page 10). A single activity is likely to affect several qualities of wilderness character. For example, an activity such as weed control is intended to restore natural conditions over the long term but may diminish the untrammeled condition of the wilderness in the short term. These two separate outcomes, the improvement of "naturalness" and decreased "untrammeled nature," will be monitored separately.

On the other hand, separate activities undertaken for different purposes may cumulatively diminish the same qualities of wilderness character. For example, a trail might be designated to control visitor impacts on vegetation. In the same vicinity, a fence or barrier may be in place to protect sensitive resources from recreational impacts. Though the two activities are unrelated, both activities have an effect on the "undeveloped" quality of wilderness character. Monitoring the effects of single activities to multiple qualities of wilderness character will improve understanding of the effects upon wilderness character in combination and over time.

Effects of intentional, unintentional, and unauthorized activities will be captured under the monitoring system. The monitoring program will provide a greater understanding of the overall and specific condition of each wilderness area. Information generated in monitoring wilderness conditions will indicate: 1) the current state of wilderness

character; 2) how wilderness character is changing over time; 3) how stewardship actions are affecting wilderness character; and 4) what stewardship priorities and decisions would best preserve and sustain wilderness character. Monitoring will also provide Wilderness Managers with more complete information, which will improve the evaluation of future proposed activities. However, monitoring will not be used to compare conditions and changes within these wilderness areas with other wilderness areas in the National Wilderness Preservation System.

Untrammeled	The following monitoring would assist the BLM in tracking and improving the untrammeled condition of the wilderness areas:

- A log of all annual management and other activities that control or manipulate flora, fauna, soils, water, or natural disturbance factors present in the wilderness would be maintained in each area's permanent wilderness file. A description, location, purpose, and expected outcome of each activity would be documented. Activities that may be tracked include:

  - Campsite expansion and dispersion.
  - Rehabilitation projects.
  - Vegetation restoration and fuels treatment projects.
  - Fire suppression activities.
  - Emergency Stabilization and Rehabilitation activities.
  - Treatments of noxious or invasive vegetation.
  - Wildlife management activities.
  - Periods of livestock grazing.
  - Archaeological and historic resource protection projects.

Solitude and Primitive, Unconfined Recreation	The following monitoring would assist the BLM in preserving outstanding opportunities for solitude or a primitive and unconfined type of recreation:

- A log of sights and sounds of civilization would be maintained in each area's permanent wilderness file. A description and location of the activity inside or outside wilderness would be documented.

- A log of all regulations or restrictions occurring in the wilderness areas will be maintained in each area's permanent wilderness file. A description of the regulation and its purpose will be documented.

- Visitor use encounters on designated trails would be monitored through one or more of the following methods:

- Visitor sign-in and comment forms at trailheads and access points.
- Public comment received by mail or by e-mail.
- Automated visitor counters may be located at trailheads or access points.
- Wilderness rangers or volunteer stewards would visit trailheads and access points at least once every two months to record the number of vehicles and collect written comments or other trail data.

❖ Wilderness rangers or volunteer stewards would hike each trail at least twice a year to record the number of encounters and trail conditions. Trail conditions would be recorded using a Global Positioning System (GPS) and photos would be taken as needed.

❖ The wilderness areas would be monitored at boundary roads and access points at least once every three months by wilderness staff and law enforcement rangers or volunteer stewards to detect any unauthorized uses. Additionally, over-flight and aerial surveillance monitoring will occur twice annually to assist in detecting unauthorized uses.

❖ Campsites would be recorded by the wilderness ranger to assure compliance with Plan standards. GPS coordinates and photos would be taken for campsites to track long-term trends.

❖ The White Rock Range Wilderness and popular hunting areas in the Parsnip Peak and Fortification Range Wilderness Areas would be monitored regularly for motorized trespasses, foot-worn hiking trails, and proliferation of campsites during hunting season by wilderness rangers, law enforcement rangers, or volunteer stewards.

Undeveloped and Natural Appearance	The following monitoring would assist the BLM to track and, where possible, restore the undeveloped and natural appearance of the wilderness:

❖ A log of all the developments, structures, and facilities present in the wilderness areas – both permanent and temporary – would be maintained in each area's permanent wilderness file. A description, location, purpose, and expected outcome of the feature would be documented.

❖ All former vehicle routes and other rehabilitated disturbances will be assessed for motorized use at least twice a year. Photo points would be established at the time of reclamation, and photos will be taken as part of the semi-annual monitoring. If unauthorized vehicle use or other forms of disturbance continue, modifications as described in the Plan would be made.

❖ All designated administrative access routes will be checked at least twice a year to assess compliance with grazing permits.

- Popular hunting areas within these wilderness areas will be monitored at the end of hunting season and structures associated with hunting, such as illegal and unauthorized blinds, will be removed.

Naturalness and Primeval Character	The following monitoring would assist the BLM in preserving the naturalness and primeval character and influence of the wilderness:

- A log of all known human alterations to the ecosystem will be maintained in each area's permanent wilderness file. A description and location will be documented or referenced. Conditions that may be tracked include:

  - Noxious and invasive weeds.
  - Special status species.
  - Air quality.
  - Presence, abundance, and distribution of native species.

- A log of natural disturbances will be maintained in each area's permanent wilderness file. A description and location will be documented or referenced. Activities that may be tracked include:

  - Fire.
  - Flood.
  - Insect or disease outbreaks.

- Monitoring for noxious and invasive weeds will occur at least once a year, with an emphasis at springs, on trails, or in washes receiving regular visitor use.

- Wildlife monitoring will be accomplished primarily by NDOW, according to the agency's established protocol. The BLM wilderness rangers will also record wildlife sightings, in particular for nesting raptors, special status species, and bighorn sheep. Monitoring or research by other entities may occur according to protocol described in the Plan.

- Findings, or a reference to the findings, from inventory, monitoring, and research projects will be included in each area's wilderness file. Other documented research outside of wilderness but applicable to the understanding of wilderness ecosystems may be referenced.

- Monitoring to assess the effects of recreation on wildlife habitat use and behavior will occur if feasible monitoring methods are developed

- Monitoring will be included to account for changes to the natural fire cycle occurring from introduced annual grasses. This additional monitoring will aid fire management in determining AMR on an annual basis. For fires having greater potential to convert native vegetation to unnatural annual grass-dominated vegetation, fire management

will have better information to adjust response to the most active suppression response compatible with the fire management objectives and procedures for the area.

- Monitoring archaeological resources and historic properties regularly by BLM staff and through the cultural site steward program will be done frequently at known sites and for areas of high visitor use.

Monitoring of Site-Specific Actions

- Additional monitoring will occur for the following site-specific actions associated with the attached Environmental Assessment in order to ensure that wilderness character is protected and that undue impacts to other resources are not occurring as a result of the proposed actions:

    - Development of the Cottonwood Canyon Trail in the Fortification Range Wilderness.
    - Development of the Cottonwood Canyon Staging Area on the Fortification Range Wilderness.
    - Development of the Scotty's Cabin Staging Area near the White Rock Range Wilderness.
    - Installation of a sign indicating public access to the White Rock Range Wilderness at the intersection near the Scotty's Cabin Staging Area.
    - Installation of informational kiosks at the Cottonwood Canyon and Scotty's Cabin Staging Areas of the Fortification Range and White Rock Range Wilderness Areas, respectively.
    - Installation of an informational kiosk along the road through Camp Valley between the Parsnip Peak and White Rock Range Wilderness Areas.
    - Installation of an information kiosk at Spring Valley State Park providing information on wilderness in Lincoln County, with specific focus on the Fortification Range, Parsnip Peak and White Rock Range Wilderness Areas.
    - Rehabilitation of 27.2 miles of former vehicle routes, including 8.4 miles in the Fortification Range Wilderness, 8.0 miles in the Parsnip Peak Wilderness and 10.8 miles in the White Rock Range Wilderness.
    - The treatment of a small infestation of Dalmatian toadflax with the herbicide Picloram near the southeastern boundary of the Parsnip Peak Wilderness.

Plan Evaluation

All field reports, photographs, and monitoring data will be maintained in the official wilderness files at the BLM Ely District Office. The Plan will be revised when the management actions prescribed no longer meet the wilderness management objectives, or when a change in the existing situation warrants revised management. The need for revision will be reviewed every five years. If the decision is made to revise the Plan, it will be accomplished with public participation. Minor revisions such as typographical or cartographical errors may be made by inserting an errata sheet.

Plan Implementation Sequence

Management of the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas will be carried out in accordance with this Plan under the direction of the Ely BLM Wilderness Staff. Other BLM staff and volunteers may be called upon for support or subject expertise. Four types of management activities may occur. These types of management activities may be completed based upon the NEPA analysis done for this plan:

- Ongoing activities carried out through the life of the Plan.
- Activities that will be implemented as special projects at the beginning of the plan. The second two types of management activities will require action-specific NEPA analysis before they can be completed.
- Management activities triggered by changes in conditions as detected through monitoring.
- Activities that may be proposed in the future for which general guidance exists in the plan, or that may not be addressed in the plan.

The following list shows the priority sequence for accomplishing management activities of this Plan. The actual implementation could be altered based on funding and staff availability outside the control of this Plan.

Ongoing Activities

- Maintenance of boundary signs.
- Trail, vehicle access point and staging area construction and maintenance.
- Vegetation clearing around archaeological resources.
- Wilderness monitoring;
  - Visitor use monitoring.
  - Natural resource monitoring.
  - Trail condition monitoring.
  - All other wilderness character monitoring.
  - Visitor information dissemination.

Wilderness Management Plan Specific Projects

Implementation would not require additional NEPA analysis for the following projects that are addressed in the EA (EA-NV-040-2007-111 and EA-UT-040-2007-35):

- Archaeological, botanical and threatened and endangered species clearances to support Plan implementation.
- Write and publish supplemental rules for all visitor use standards established in the Plan as specified under 43 CFR 8365.1-6.
- Rehabilitation;
  - Former vehicle routes.
  - Campsites.
  - Prospecting disturbance.
  - Vehicle access parking points established.
- Staging areas developed as appropriate.
- Signing;
  - Trailhead, vehicle access points and staging area wilderness information signs, and kiosks.
  - Off-site kiosks.
  - Public access signage.
- Removal of unnecessary structures and installations.
- Maintenance, modification, or removal of livestock developments as appropriate.
- Fire Management Plan.

Changing Conditions Requiring Subsequent NEPA Analysis

- New visitor impacts.
- Fire rehabilitation.
- Trail designation;
  - Trail preparation (improvement of sections not currently within standards).
  - Trailhead development.
- New trail construction.
- Trail reconstruction or stabilization.
- New vehicle access point or staging area construction.
- Management of social conditions;
  - Visitor use regulations and/or supplemental rules.
  - Group size limits.
  - New sign or kiosk installation.
- NEPA following non-conforming fire management and suppression actions.
- Herbicide use in noxious and invasive plant species control.
- Large weed control projects.

Potential Future Proposals Requiring Subsequent NEPA Analysis

- ❖ Riparian area restoration needed to mitigate wild horse and livestock grazing impacts.
- ❖ Vegetation restoration projects.
- ❖ Fuels treatment projects.
- ❖ Emergency Stabilization and Rehabilitation projects.
- ❖ Guiding permits.
- ❖ Wildlife projects.
- ❖ Research on natural or cultural resources.
- ❖ Herbicide use for noxious and invasive plant species control on additional infestations.

White Rock Range Wilderness

Fortification Range Wilderness
Parsnip Peak Wilderness
White Rock Range Wilderness

Fortification Range Wilderness

Environmental Assessment
December 2008

U.S. Department of the Interior
Bureau of Land Management
Ely District Office
EA-NV-040-2007-111

U.S. Department of the Interior
Bureau of Land Management
Cedar City Field Office
EA-UT-040-2007-35

Chapter One

Background Information

Introduction

Wilderness Designation

The Fortification Range, Parsnip Peak and White Rock Range Wilderness areas were designated by the Lincoln County Conservation, Recreation and Development Act of 2004 (Public Law 108-424 November 30, 2004). This Environmental Assessment (EA) covers management actions described in the Wilderness Management Plan. Subsequent site-specific National Environmental Policy Act (NEPA) analysis will be prepared as necessary to address future actions related to these particular wilderness areas.

This EA is tiered to the following Environmental Assessment:

- Wilderness Disturbance Reclamation Environmental Assessment (NV-040-05-010).

Location

The Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas are located approximately 10 to 50 miles north and northeast of Pioche in Lincoln County, Nevada. Due to their proximity and similar management issues, they are being addressed in a single Plan (See EA Map 1 Page 61).

Parsnip Peak Wilderness

EA Map 1: Overview of Wilderness Areas

Purpose and Need for the Proposed Action

The purpose of creating a Wilderness Management Plan (WMP) is to preserve the areas' wilderness characteristics by identifying the conditions and opportunities that will be managed for within the wilderness areas over a ten-year span.

The need for the Plan stems from the Wilderness Act of 1964, which defines wilderness and mandates that the primary management direction is to preserve wilderness character. The Plan creates specific management guidance addressing resources and activities in these wilderness areas. Wilderness character is a complex idea and is not explicitly defined in the Wilderness Act; Wilderness characteristics are commonly described as:

- **Untrammeled ─** area is unhindered and free from modern human control or manipulation.
- **Natural ─** area appears to have been primarily affected by the forces of nature.
- **Undeveloped ─** area is essentially without permanent improvements or human occupation and retains its primeval character.
- **Outstanding opportunities for solitude or a primitive and unconfined type of recreation ─** area provides outstanding opportunities for people to experience solitude or primitive and unconfined recreation, including the values associated with physical and mental inspiration and challenge.
- **Supplemental values ─** complementary features of scientific, educational, scenic or historic values.

Relationship to Planning

This WMP has been analyzed within the scope of the Ely Resource Management Plan (2008) and has been found to be in conformance with the goals, objectives, and decisions of the Decision Summary and Record of Decision.

Bureau of Land Management (BLM) planning regulations (43 Code of Federal Regulations 1610.3.2[a]) require that BLM resource management plans be consistent with officially approved plans of other federal ,state, local and tribal governments to the extent those plans are consistent with federal laws and regulations applicable to public lands. Although this regulation does not apply to other official plans created after the land use plan is implemented, the BLM strives for management decisions to be consistent with other official plans.

The Wilderness Management Plan is not consistent with the Lincoln County Public Land & Natural Resource Management Plan of 1997. The plan states "No additional wilderness areas shall be designated in Lincoln County." The Lincoln County Commission did support the Lincoln County Conservation, Recreation, and Development Act of 2004 wherein these wilderness areas are designated.

This WMP is consistent with the Beaver County Utah Land Use Plan (1998).

An examination of the WMP compared with the Pinyon Management Framework Plan, prepared by the Cedar City Field Office in 1983, reveals the WMP is in conformance with the scope and intent of the Pinyon Management Framework Plan.

Compliance with Laws, Statutes, and Regulations

The proposed action and alternatives are in compliance with the following laws:

- The Wilderness Act of 1964 (16 U.S.C. §§ 1131-1136, September 3, 1964, as amended 1978).
- The Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701-1782, October 21, 1976, as amended 1978, 1984, 1986, 1988, 1990-1992, 1994 and 1996).
- The Lincoln County Conservation, Recreation and Development Act of 2004 (Public Law 108-424).
- The National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347, January 1, 1970, as amended 1975 and 1994).
- The Endangered Species Act of 1973 (16 U.S.C. §§ 1531-1544, December 28, 1973, as amended 1976-1982, 1984, and 1988).
- Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d, June 8, 1940, as amended 1959, 1962, 1972, and 1978).
- Migratory Bird Treaty Act (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989).
- Executive Order 13186 ─ Responsibilities of Federal Agencies to Protect Migratory Birds (2001).
- Management of Designated Wilderness Areas (43 CFR Part 6300).
- Recreation Management Restrictions: Occupancy Stay Limitation (43 CFR 8365.1-2(a) and Federal Register Notice NV-930-4333-02).
- Unlawful Manner of Camping Near Water Hole (Nevada Revised Statute 503.660).

Relationship to Policies and Guidelines

The proposed action and alternatives are in conformance with the following guidelines, manuals, and Administrative Laws:

- Management of Designated Wilderness Areas (BLM Manual 8560).
- Wilderness Management Plans (BLM Manual 8561).
- Grazing Guidelines (House Report No. 101-405, Appendix A).
- Wildlife Management Guidelines (House Report No. 101-405, Appendix B).
- BLM Emergency Stabilization and Rehabilitation Handbook.

Issues

Issues of primary importance identified during the internal and external scoping process for this Wilderness Management Plan related to the following wilderness characteristics:

- Opportunities for solitude and primitive, unconfined recreation.
- Protecting and enhancing the undeveloped and natural appearance of the wilderness areas.
- Preserving naturalness, primeval character, and influence of the wilderness areas.
- Management of special non-wilderness land uses allowed by the Wilderness Act.

Certain issues identified during public scoping are already addressed in existing planning documents or policy, and are out of the scope of this Plan. They include:

- Opening former vehicle routes in wilderness to motorized travel ─ The Wilderness Act prohibits motorized vehicles in wilderness.
- Managing airspace above wilderness ─ The BLM does not have the authority to manage air space.
- Amending wilderness boundaries ─ Wilderness boundaries are designated by Congress and legislation would have to be enacted to authorize any changes.
- Use of volunteers in posting of wilderness boundaries ─ Responsibility for delineating wilderness boundaries are delegated to BLM staff only.
- Allowing for the future possibility of installing water resource facilities such as pipelines and water tanks ─ Restrictions on new water resource facilities is stated in the Lincoln County Conservation Recreation and Development Act of 2004.
- Elimination of grazing ─ The Wilderness Act explicitly allows grazing to continue at rates previous to wilderness designation.
- Numerous general comments that this Plan does not have the authority to address.

Hiking in the Parsnip Peak Wilderness

Chapter Two

Description of the Proposed Action and Alternatives

Actions identified in the proposed action and the alternatives would apply within the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas unless otherwise specified. **All actions other than site-specific actions in this EA would be subject to a Minimum Requirements Decision Guide and action-specific NEPA analysis.**

General Description

Proposed Action

The Proposed Action emphasizes the need to maintain and enhance wilderness qualities as the public use of the areas increases. High priority is placed on restoring and maintaining an indigenous Great Basin ecosystem through vegetation, riparian, and post-fire projects. The Proposed Action also allows for the potential future use of non-native species in reclamation projects in order to prevent the establishment of cheatgrass after fire disturbance and to promote the long-term establishment of native plant species. One short trail would be designated in the Fortification Range Wilderness to provide access and limit resource impacts in Cottonwood Canyon. The rehabilitation of approximately 27 (not including administrative access routes) miles of existing former vehicle routes and any future unauthorized motorized routes for the enhancement of the wilderness quality of naturalness would occur. Grazing permittees would have scheduled motorized access along specified routes to selected range developments in order to manage their livestock. The Proposed Action also allows for more proactive management actions should monitoring show unacceptable impacts to wilderness qualities EA Maps 2─4 present the site-specific proposed management actions (See Pages 67─69).

White Rock Range Wilderness

Alternative 1

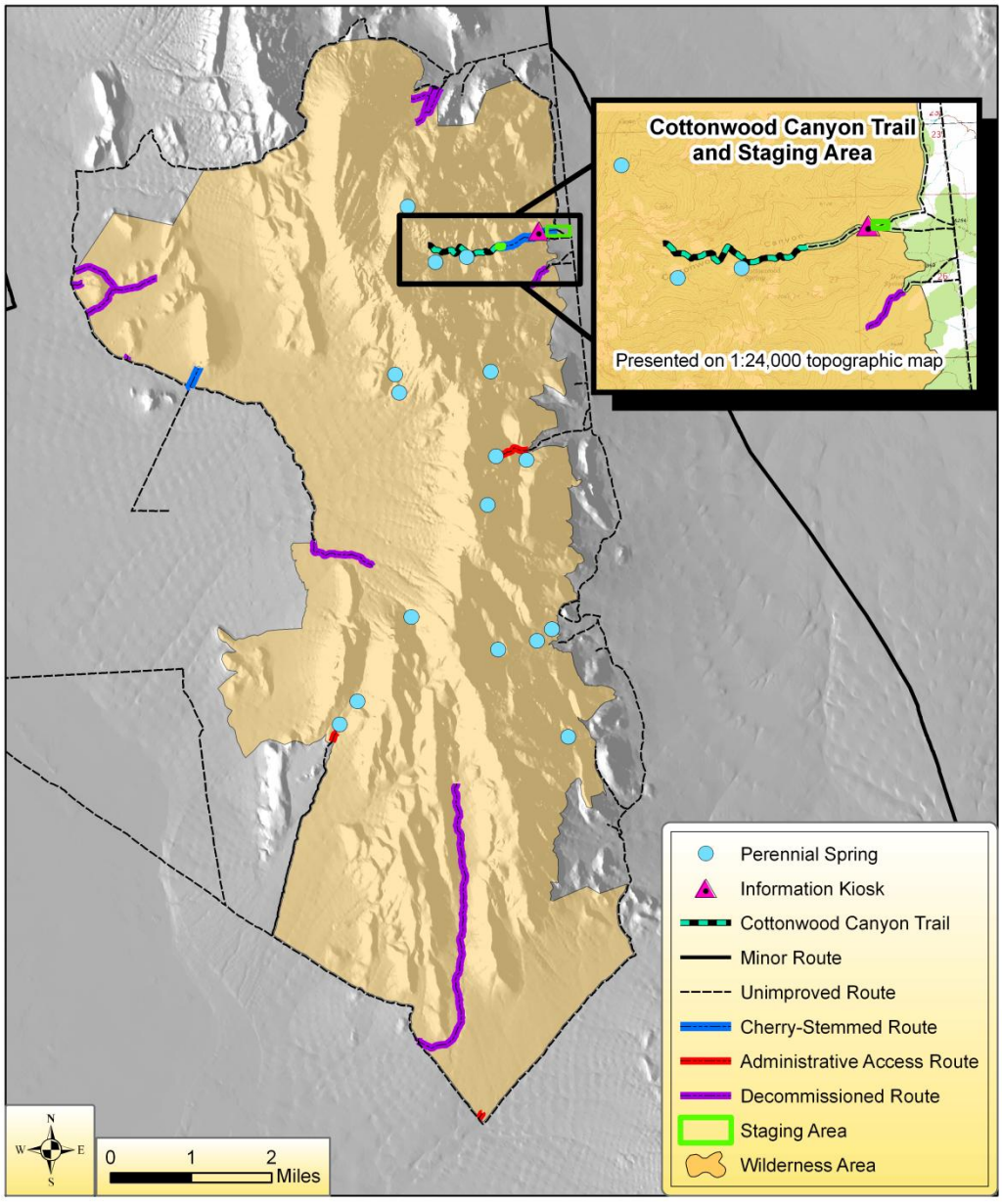
Alternative 1 emphasizes reactive approaches regarding managing for wilderness quality. This alternative does not place a high priority on restoring vegetative communities, although reclamation project proposals could be considered for implementation. It allows for geocaching and letterboxing to occur under site-specific stipulations, but restricts guide service options and large group opportunities by setting visitor use limits for both. Alternative 1 would allow for limited rehabilitation of former vehicle routes, and grazing permittees would be granted motorized access on a case-specific basis from the District Manager. EA Maps 5─6 present Alternative 1 actions (See Pages 70─71).

Alternative 2: No Action

The No Action alternative represents management that would occur without preparing a specific wilderness plan. It is presented as a baseline for comparison of management action impacts among the alternatives.

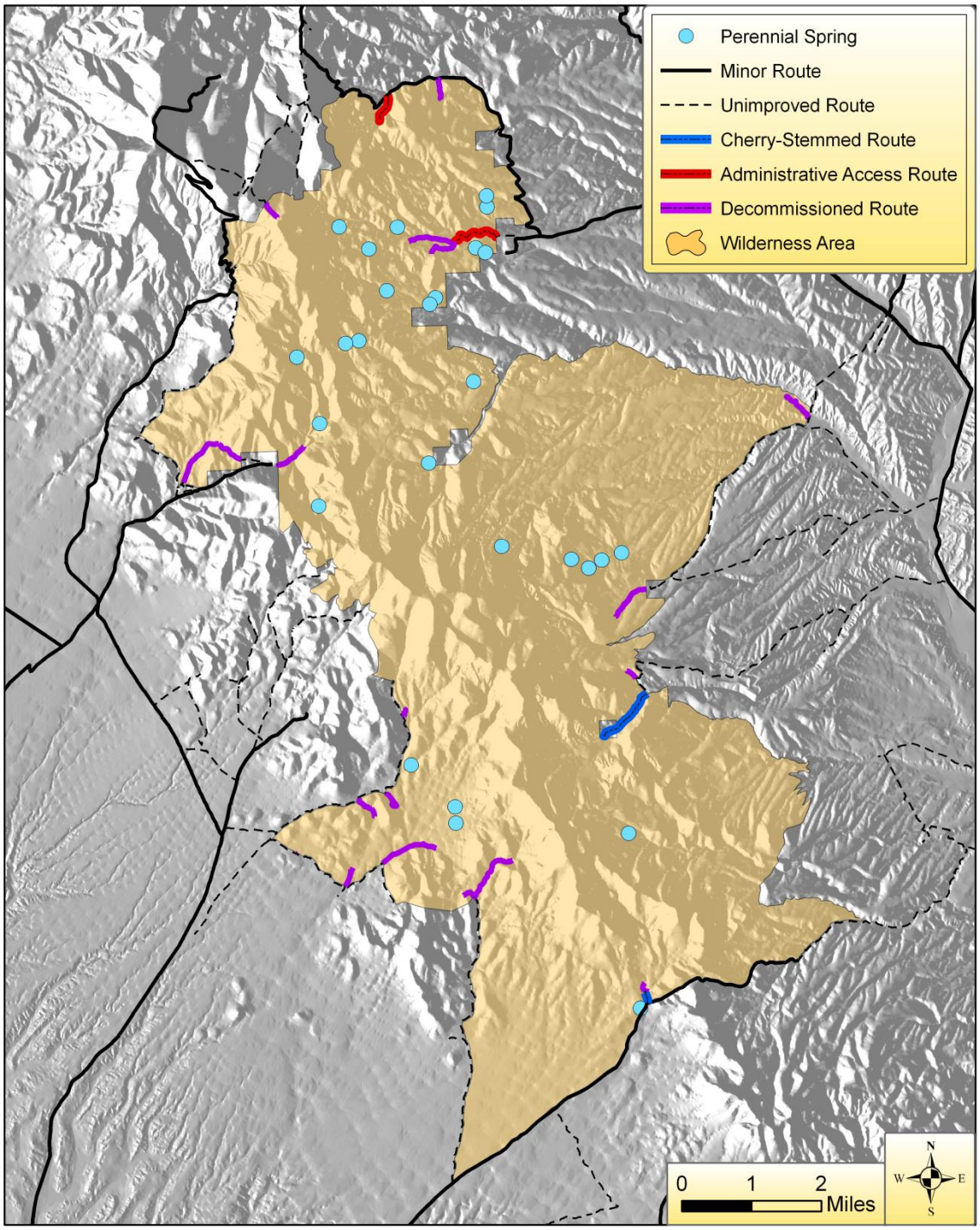
Written description for this map is found in the Trails and Livestock Grazing sections (P. 82, 93).

EA Map 2: Cottonwood Canyon Trail, Staging Area & Administrative Access Routes in Fortification Range Wilderness



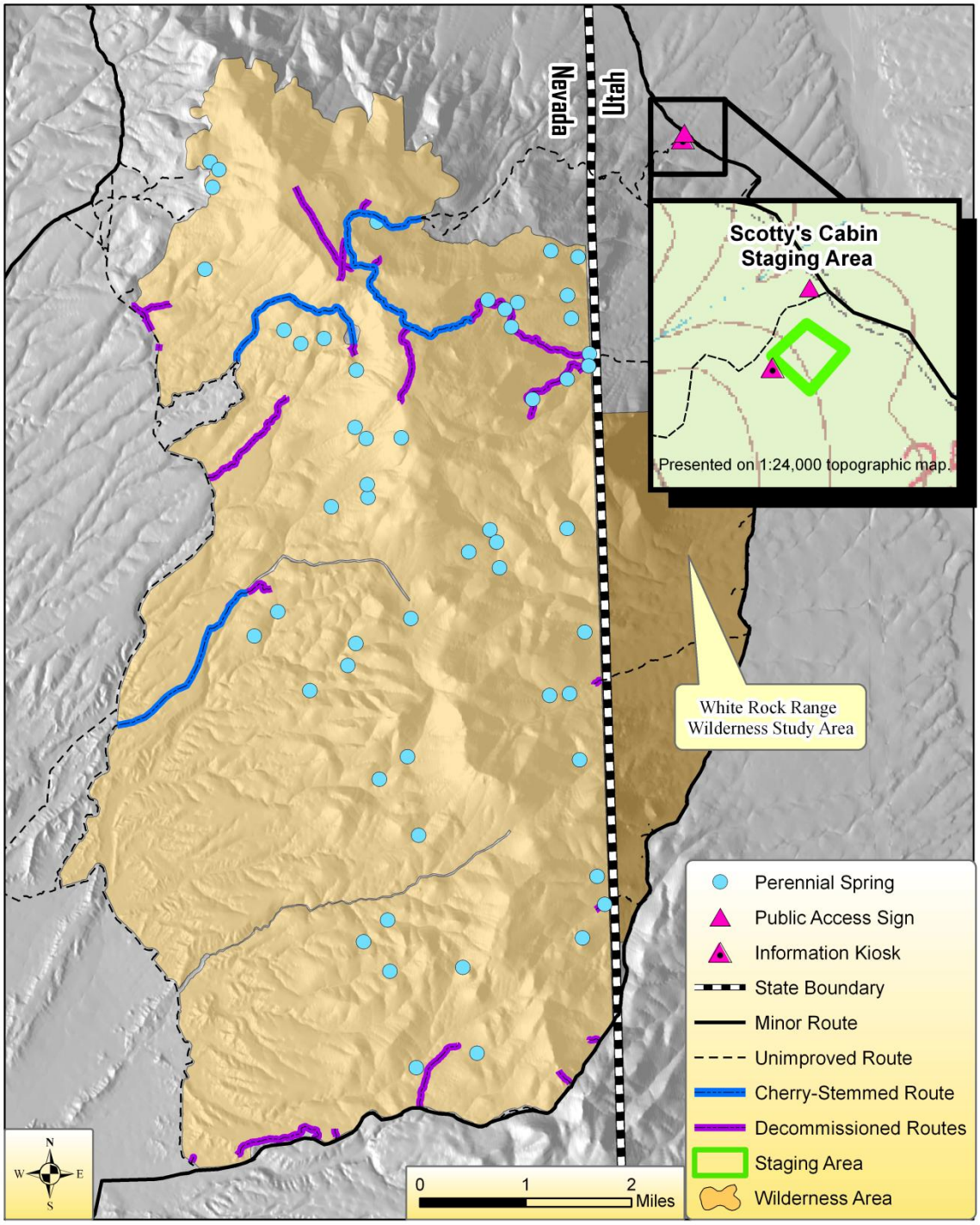
Written description for this map is found in the Livestock Grazing section (P. 93).

EA Map 3: Administrative Access Routes in Parsnip Peak Wilderness



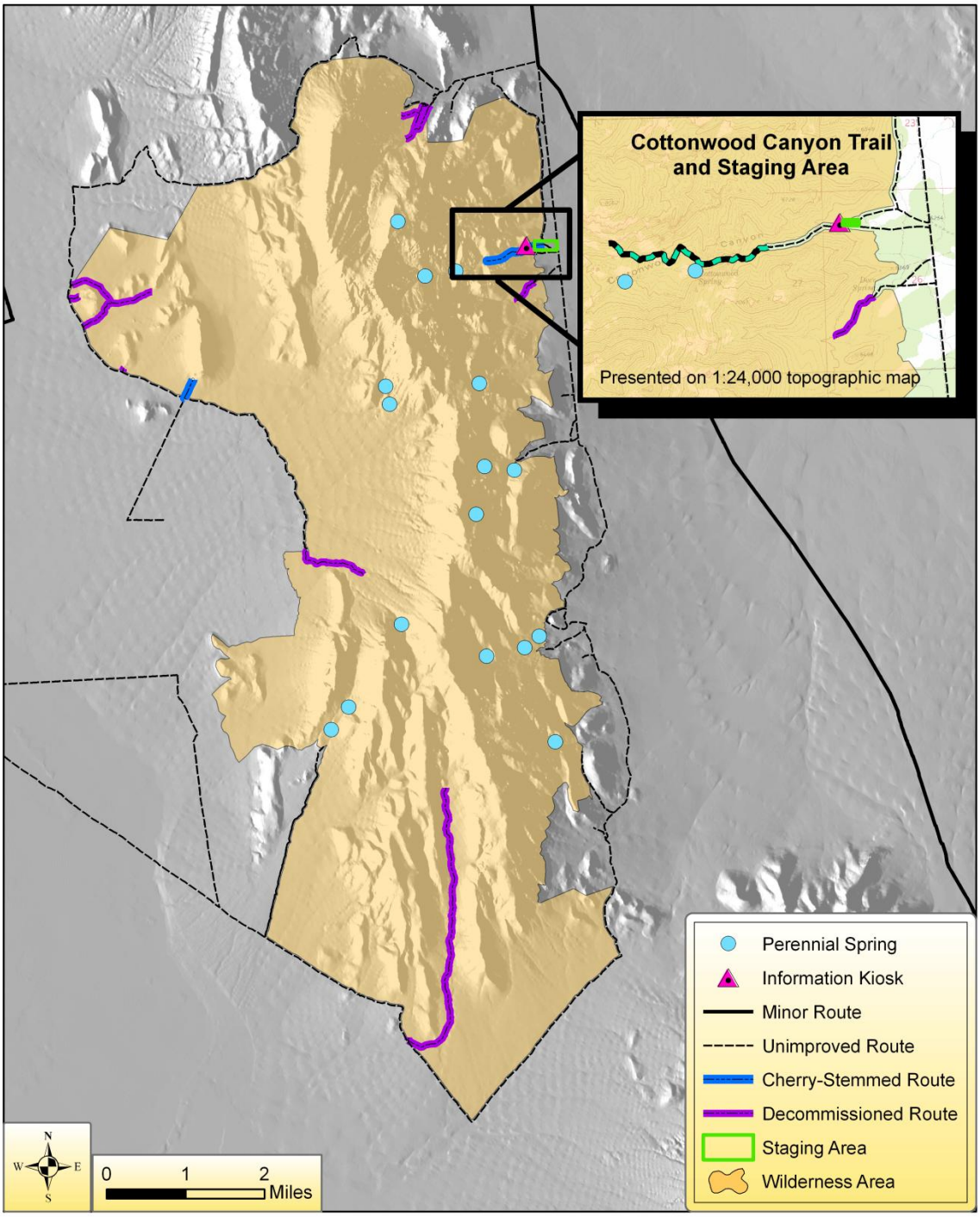
Written description for this map is found in the Vehicle Access and Staging Areas section (P. 88).

EA Map 4: Scotty's Cabin Staging Area in White Rock Range Wilderness



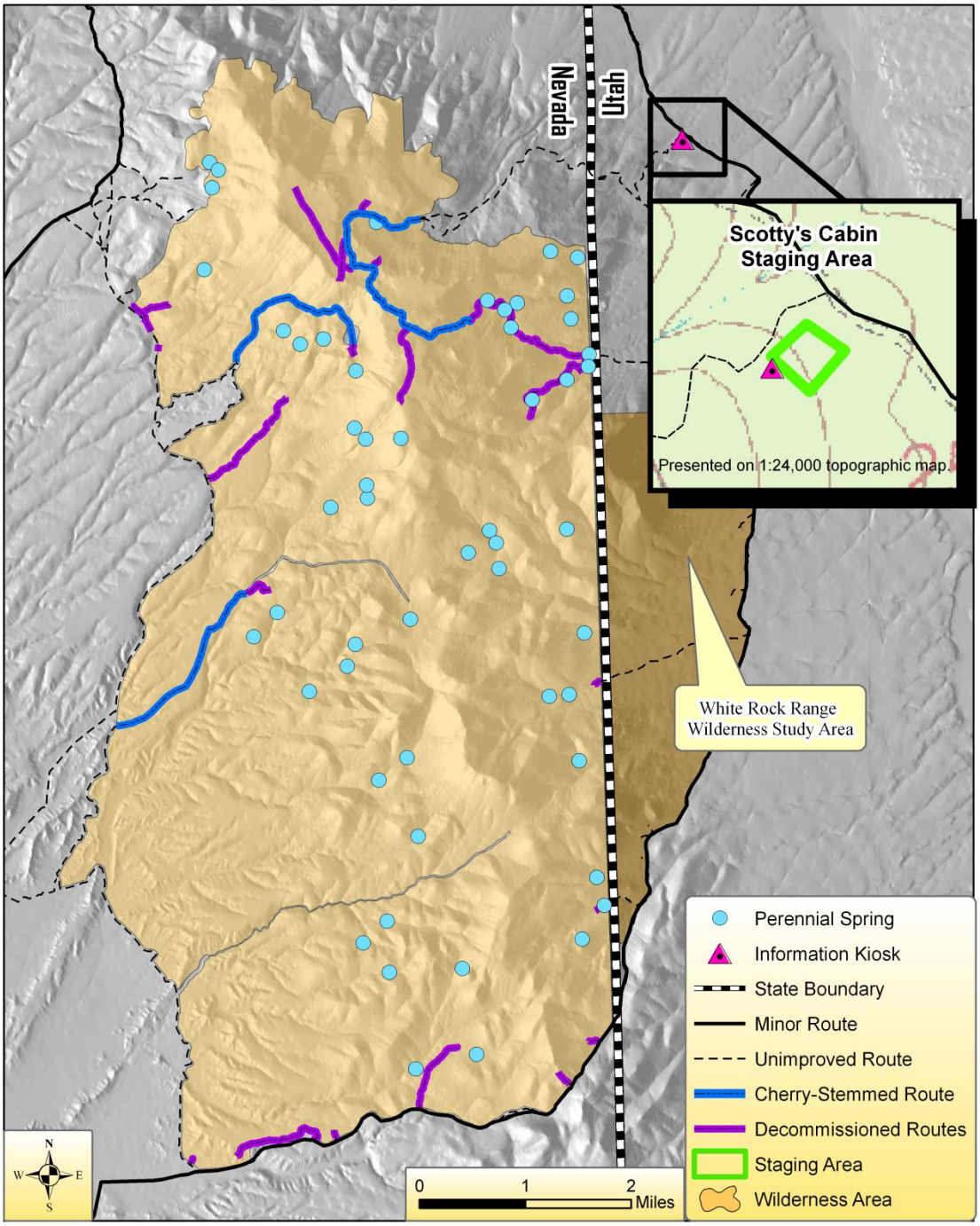
Written description for this map is found in the Trails section (P.82).

EA Map 5: Alternative 1 for Fortification Range Wilderness



Written description for this map is found in the Vehicle Access and Staging Areas section (P. 88).

EA Map 6: Alternative 1 for Scotty's Cabin Staging Area in White Rock Range Wilderness



Specific Description of Management Actions

In the following proposed actions and alternatives, ground disturbing activities would follow the Best Management Practices outlined in the BLM Interim Management Guidelines regarding migratory birds.

Objective	Preserve the primeval character and influence of the wilderness areas by managing for the integrity of an indigenous Great Basin ecosystem, including generally reducing non-native plants in favor of native plants.

Noxious and Non-Native Invasive Weeds

Proposed Action

The management ideal is to sustain only native species in wilderness areas. Invasive weeds include both broadleaf and grass species. The invasive annual cheatgrass is present in the three wilderness areas and may require different management techniques than other noxious and invasive weeds. Seeding and transplant projects will follow guidelines presented in the Emergency Stabilization and Rehabilitation section (See Page 80).

Noxious weeds in Nevada are classified by the Nevada Department of Agriculture and the Plant Protection Act (2000) administered by the United States Department of Agriculture‘s Animal and Plant Health Inspection Service (APHIS). Dalmatian toadflax (*Linaria dalmatica*) is the only noxious weed documented within wilderness. When noxious and invasive weeds are found, emphasis would be placed on controlling small infestations and weeds with the potential to spread and displace native plants. Treatments for large infestations (defined by the BLM Ely District Weeds Coordinator), would be considered separately. BLM Ely District weed management protocols would guide the use of herbicide treatments. Treatments would be prioritized in the following order, though it is likely that treatment combinations would be necessary in some situations:

1. Manual removal with hand tools if weeds could be controlled or eradicated without causing re-sprouting, without soil disturbance leading to expansion of noxious or invasive species, and where infestations are of a size manageable by hand crews.

2. Herbicides applied by backpack and pack stock equipment, where manual removal is not effective.

3. Biological control agents approved by the Animal and Plant Health Inspection Service where infestations are of such size that eradication by manual removal or herbicides is not feasible. Current examples consist of a stem-boring weevil for Dalmatian toadflax and a leaf beetle for tamarisk control.

4. Herbicides applied aerially or with motorized equipment, where control is feasible, where control impacts are quickly and readily rehabilitated and where the infestation is of such size that herbicide cannot be effectively applied without motorized equipment.

5. Reseeding treated areas preferably with native species of local genetic stock following guidelines outlined under the Emergency Stabilization and Rehabilitation heading (See Page 80).

6. Alternative treatments, such as targeted grazing by livestock, would be considered.

Site-Specific Proposed Action

An infestation of Dalmatian toadflax (*Linaria dalmatica*) covers approximately 3,100 square feet at 2 to 25 percent cover near the southeastern boundary of the Parsnip Peak Wilderness at UTM coordinates 739633.8910, 4216790.9745 Zone 11 (in T. 2N, R. 69E, Sec. 5). Dalmatian toadflax is a listed Nevada noxious weed and highly invasive. As an opportunistic species, infestations of Dalmatian toadflax are prone to increase rapidly following a wildfire disturbance, as seen around the Pioche area. Since these wilderness areas are identified as wildland fire use areas in which wildfires are permitted to burn naturally, controlling and eradicating the current small infestations of Dalmatian toadflax is critical to preventing a massive infestation in the future.

Hand pulling of individual Dalmatian toadflax plants in this infestation would occur followed by treatment once a year in the fall with a backpack sprayer spot foliar method with the herbicide Picloram at a rate of four pints per acre. Picloram is approved for use on BLM lands through the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic EIS (September 2007). All appropriate Pesticide Use Proposals would be signed and in place before treatment begins. All herbicide label and Material Safety Data Sheets instructions would be strictly followed. No herbicides would be mixed nor would any herbicide containers be rinsed on site. All herbicide applications would be made by a certified Nevada Pesticide Applicator or someone who is closely supervised by one. The required chemical spill containment and clean up kits would be on site during treatment. A Pesticide Application Record would be completed for each treatment and turned into the Noxious and Invasive Weeds Specialist for the Ely Field Office. The treatments would continue until the infestation is completely eradicated, and the site would be monitored for at least five years after that time.

Alternative 1

This alternative differs from the proposed action in that Dalmatian toadflax would be treated by manual removal only. However, it has been shown that manual removal only is not as effective as treatment combinations. All standard administrative protocol for such treatment would be followed. Treatments would continue until the infestation is eradicated, and the site would be monitored for at least five years after that time.

Alternative 2: No Action

The difference from the proposed action is that there is currently no existing management plan with which to treat invasive grasses such as cheatgrass. Noxious weeds would be treated on a case-by-case basis as per the District Noxious Weed Plan. The BLM's noxious weed classification system (which is described in the BLM Manual 9015 Integrated Pest Management) would be consulted in setting priorities for weed control.

Vegetation Restoration and Fuels Management

Proposed Action

The objective of vegetation restoration and fuels management projects would be to foster indigenous vegetation community resilience and to restore wilderness ecosystem function. This would be accomplished by addressing issues that challenge Great Basin ecosystem integrity, such as the expansion of pinyon-juniper trees and the establishment of invasive species such as cheatgrass, and by addressing natural and anthropogenic changes that affect community ecology, such as fire suppression.

Projects with objectives that fall within the bounds of maintaining or improving wilderness character would be considered. Proposals would be accepted and projects such as the following could be approved:

Restoration Management: Proposals would be accepted to restore native vegetative communities that are unique within these wilderness areas, including seral aspen and ponderosa pine. Restoration projects could also attempt to enhance the resilience of impaired vegetation communities. Projects could include the thinning of conifers in seral aspen, or pinyon and juniper in ponderosa pine. Temporary structures, such as exclosure fences, could be permitted when their presence would contribute to the long-term enhancement of wilderness character.

Fuels Management: Wildland fire, prescribed burning, and manual techniques could be approved for fuels management and may be implemented when the objective is to retain the primeval character of the environment and allow ecological processes to function properly. Where the use of natural fire does not meet management objectives, prescribed burning may be approved according to BLM wilderness policy on a case-by-case basis for the following purpose:

- To restore or maintain the natural condition of a fire-dependent ecosystem.
- To restore fire where past strict fire control measures have interfered with natural, ecological processes.
- Where a primary value of a given wilderness area will be perpetuated as a result of the burning.
- Where it will perpetuate a threatened or endangered species.

Alternative 1

All vegetation restoration and fuels treatment proposals would be considered on a case-by-case basis.

Alternative 2: No Action

There is no existing plan with which to implement vegetation restoration and fuels management projects.

Objective	Manage wildlife habitat and wild horses to provide for healthy, viable, and naturally distributed wildlife populations with the least amount of action necessary.

Wildlife Management Activities

Proposed Action

Over the life of this plan it may be necessary to implement wildlife management activities to prevent degradation or enhance wilderness characteristics by promoting healthy, viable and more naturally distributed wildlife populations. Wildlife management activities within these designated wilderness areas would be conducted in conformance with the BLM–NDOW MOU and guided by LCCRDA (2004), which may include the occasional and temporary use of motorized vehicles or mechanized tools.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Wildlife Relocation

Proposed Action

Wildlife transplants (i.e. removal, augmentation, or reintroduction of wildlife species) may be permitted if judged necessary to perpetuate or recover a threatened or endangered species or to restore populations of indigenous species eliminated or reduced by human disturbance. Locations outside of wilderness boundaries would be utilized first, and if not available, would be implemented in a manner compatible with wilderness characteristics. Transplant projects, including monitoring, require advance written approval from the

BLM if the action involves ground-disturbing activities, motorized methods, and/or temporary holding and handling facilities. Release of wildlife on public lands would be in conformance with BLM Manual 1745 (Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife and Plants, 1992) and the BLM–NDOW MOU. The BLM would provide comment to NDOW on all releases near these wilderness areas.

If motorized or mechanized means are authorized staging would occur outside the wilderness boundary. When feasible, project implementation would occur during periods when visitor use is low (for example, weekdays). In order to inform visitors of impending activity, relocation dates would be posted on the BLM website two weeks in advance.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Wildlife removal, reintroduction, or augmentation of species may be approved on a case-by-case basis according to current laws, policies, and guidelines but without the guidance of a comprehensive wilderness management plan.

Wildlife Water Developments

Proposed Action

No wildlife water developments currently exist in these wilderness areas. However, LCCRDA (2004) permits the establishment of wildlife water developments when considered essential to preserve, enhance, or prevent degradation of wilderness character. Developments must have minimal visual impact and require site-specific National Environmental Policy Act (NEPA) analysis. The following criteria would be used to identify wildlife water developments:

- To mitigate for loss of natural water sources.
- To mitigate for habitat loss or habitat fragmentation.
- To reduce inter-specific competition between wildlife, livestock, and horses.
- To reduce inter-specific competition between wildlife species.
- In suitable wildlife habitat that is water limited.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Wildlife Damage Management

Proposed Action

To maintain the areas' natural character, wildlife damage management may be necessary to protect federally listed, declining, and reintroduced indigenous wildlife species; to prevent transmission of diseases or parasites affecting other wildlife and humans; or to prevent serious loss of livestock. Wildlife damage management is only conducted at the request of federal, state, or local agencies, and private organizations or individuals.

Activities would use the minimum amount of control necessary to resolve wildlife damage problems. Acceptable control measures include lethal and non-lethal methods, however, toxicants and M-44 devices (sodium cyanide) are prohibited. Activities will be conducted on foot and may include the use of stock. Use of motorized vehicles, motorized equipment, and/or mechanical transport must be approved by the BLM on a case-by-case basis. The BLM and USDA─APHIS Wildlife Services will create an annual work plan for wildlife damage management; however, APHIS is not required to notify the BLM of activities occurring within wilderness. Activities will be conducted in conformance with the BLM─APHIS MOU (1995) and BLM Manual 8560 (Management of Designated Wilderness).

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Herd Management Areas

Proposed Action

Activity plans designed for the management of wild horses and manage burros is administered by the BLM Wild Horse Burro Specialist. Wild horse management would seek to conform to Appropriate Management Level (AML) for the Wilson Creek Herd Management Area (HMA). If the Minimum Requirements Decision Guide (MRDG) results in motorized means for management, aircraft, including helicopters, may be used to survey, capture, transplant, monitor, and provide water for wild horses. However, aircraft may not land inside wilderness boundaries except in cases of emergency or by approval from the Ely District Manager. Otherwise on-the-ground horse management activities would be accomplished on foot or by the use of pack stock. In cases where impacts to springs and riparian systems result from wild horses, mitigation measures may be employed to prevent further degradation or to restore wilderness character.

Alternative 1

The difference between this alternative and the proposed action is that impacts to springs and riparian areas would not be mitigated.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Objective	Preserve the primeval character and influence of the wilderness by allowing fire as a natural process of disturbance and succession where the ecosystem is fire-dependent; manage fire where it threatens wilderness character and/or natural ecological conditions or processes; prevent fire where it threatens human life or property.

Fire Management

Proposed Action

Fire management objectives in the wilderness areas would be structured in accordance with the 2004 Ely District Fire Management Plan (FMP). According to this FMP, the three wilderness areas are within Fire Management Units (FMUs) that utilize natural wildland fire to achieve resource management objectives and thus the preservation of wilderness character. The use of wildland fire would be limited along the Utah border in the White Rock Range Wilderness due to Utah fire management objectives. EA Map 9 (See Page 133) displays the FMUs associated with these wilderness areas. The majority of each area is characterized by Fire Regime Condition Class (FRCC) 3, which means that an area's fire regime has been significantly altered. An FRCC rating is the degree of departure from the historical fire regime, or in other words; fire frequency and severity.

Appropriate Management Responses (AMRs) would be developed following the initial report for wildland fires in the planning area and would include a range of specific actions including monitoring, confinement, initial attack and suppression/extinguishment, or wildfire suppression with multiple strategies. AMR would be determined for each wildland fire based on site factors, including fuel loading and fire behavior, protection of natural and cultural resources, and the circumstances under which a fire occurs, while ensuring the safety of firefighter, the public, and protection of private property. Wildfire management priorities include maintaining native vegetation diversity by managing fire size to minimize the spread and density of noxious or invasive weeds, such as cheatgrass. Minimum Impact Suppression Tactics (MIST) guidelines would be followed in an effort to minimize impacts to wilderness character. Any actions deemed necessary by the Incident Commander for public and firefighter safety would be authorized.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Fire Suppression Guidelines

Proposed Action

If the AMR dictates the use of fire suppression, minimum cost and consistency with resource objectives will be considered. The following points would guide suppression within wilderness:

- A Wilderness Specialist would be dispatched to all fires occurring in or threatening a wilderness area.
- Use of any motorized equipment, including heavy machinery such as bulldozers, would be considered for approval by the District Manager in cases where the fire is threatening human life, property, or wilderness characteristics.
- Helibases and helispots would be located outside of wilderness boundaries. When this is not feasible, the District Manager may approve sites within wilderness that require minimal clearing of natural vegetation.
- Staging areas and fire camps requiring motorized access would be located outside of wilderness unless authorized by the District Manager.
- Staging areas and fire camps that only require non-motorized access may be located in wilderness areas if authorized by the Wilderness Resource Advisor.
- Sling loading materials into or out of wilderness using a helicopter must be approved by the District Manager.
- Helicopters or other aircraft may be used for aerial reconnaissance work.
- The Ely District Office Noxious Weed Prevention Schedule, which identifies best management practices, would be utilized. Suppression equipment would be inspected and washed to prevent the spread of noxious weeds. Wash-down sites would be recorded using a GPS unit, if possible, and reported to the Ely District Office Weeds Coordinator. Camps and other assembly points would not be located in noxious weed infestation areas.
- Use of retardant must be approved by the District Manager; if retardant is not approved, water may be dropped from retardant aircraft as ordered by the Incident Commander without additional authorization.
- All fire suppression activities in wilderness would use MIST unless a higher degree or level of fire suppression is required.
- Leave No Trace principles would be used in wilderness areas. All evidence of human activity would be removed or rehabilitated to the maximum extent possible.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Emergency Stabilization and Rehabilitation

Proposed Action

The purpose of emergency stabilization is to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from fire. The purpose of rehabilitation is to emulate historical or pre-fire ecosystem structure, function, diversity, and dynamics consistent with approved land management plans, or to restore or establish a healthy, stable ecosystem in which native species are well represented (Department of Interior, 2004).

For the purpose of this Plan, "reclamation" refers to both emergency stabilization and rehabilitation. Any reclamation projects in non-emergency situations would require District Manager approval, site-specific NEPA analysis, and, if feasible, would avoid times of high visitor use such as weekends, holidays, and hunting seasons. If any motorized vehicle access is authorized to meet the minimum requirements for the administration of wilderness, routes and evidence of human activity would be removed or rehabilitated to the maximum extent possible upon completion of the reclamation work.

Should seeding be required, the use of native species, particularly of local genetic stock, would be preferred to the use of naturalized species. However, in some areas of the Great Basin ecoregion cheatgrass rapidly outcompetes native grasses leading to large infestations (Hobbs and Humphries, 1995). Although the BLM Wilderness Manual (8560) does not explicitly permit the use of non-native species for seeding projects in wilderness areas, the Wilderness Act Section 2(a) (1964) states that wilderness areas are "lands designated for preservation and protection in their natural condition." Substantial literature demonstrates that in certain circumstances native seed mixes that include non-native, non-invasive species facilitate long term decreases in cheatgrass establishment through "assisted succession;" in essence creating an "ecological bridge" leading to the stable establishment of native grasses (Waldron et al.2005; Cox and Anderson 2004; Wilson 1989; Redente and DeDuit 1988). Seeding projects of non-native, non-invasive species would be followed by a secondary seeding of native, preferably of local genetic stock, seed mixes. Additional information is presented in Appendix 2. While these seeding projects would potentially compromise wilderness character in the short-term, increased reclamation success would lead to the long term preservation of wilderness character. If other methods to control or eradicate noxious and invasive weeds were developed over the life of this Plan they would be considered.

Alternative 1

This alternative is the same as the proposed action except that where natural vegetation is expected to return in a reasonable amount of time, no rehabilitation work would be done.

Alternative 2: No Action

Emergency stabilization and rehabilitation would be applied to restore visual character and native plant productivity, and to mimic the local species diversity without the guidance of a comprehensive wilderness management plan.

Objective	Protect and preserve the outstanding archaeological and historic resources of these areas while allowing for visitor enjoyment of those resources.

Archaeological Resources and Historic Properties

Proposed Action

For protection and enhancement of archaeological resources, vegetation may be cut back or removed up to several feet from a resource or property to protect sensitive resources, such as prehistoric rock art, from wildland fire. This would be accomplished using tools such as pruning shears, pulaskis or other hand tools once annually in the spring, before fire season, and would be completed by trained cultural site stewards during routine monitoring visits.

Protection of archaeological resources from damage by wilderness visitors would be accomplished with the minimum necessary on-the-ground action. Resources would be monitored but not specifically identified for the public. If monitoring reveals that damage is occurring to archaeological resources, the BLM Ely District Wilderness Planner and Archaeologist would work together to develop a management strategy for preventing further damage, which may include, but is not limited to education, signage and natural barriers. If inventory/monitoring reveals damage is occurring to archaeological resources due to proximity to cherry-stemmed or access routes, emergency closure of that route would be considered.

Every attempt would be made for protection of artifacts in place. If artifacts are discovered in designated trails, foot-worn hiking paths or other areas of recreational use, they may be collected after consultation with the State Historic Preservation Office according to the standard process followed by the Ely District Archaeologist, as well as the Ely District Archaeologist and Wilderness Planner.

Additionally, a reconnaissance inventory for archaeological resources would be completed at natural springs in proximity to or within wilderness and along access and

cherry-stem routes in an effort to inform management of decisions for the protection of these resources.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

No special actions would be taken to protect archaeological resources and historic properties. All laws regarding the protection of these resources, such as the Archaeological Resources Protection Act of 1979 (ARPA) and the National Historic Preservation Act of 1966 (NHPA), would apply.

Objective	Provide for the use and enjoyment of the wilderness and outstanding opportunities for primitive recreation in such a way that protects natural conditions with minimal on-the-ground developments and minimal regulation of visitor activities.

Trails

Proposed Action

Designated trails would be marked on the ground at trailheads and/or staging areas and displayed on BLM recreation and wilderness maps. A cultural resource inventory of all designated trails would be completed. Foot-worn hiking paths may occur and may be available for use upon discovery by visitors. These informal foot-worn hiking paths would not be marked on the ground, displayed on BLM maps or brochures, or routinely receive maintenance.

Monitoring for new foot-worn hiking paths would specifically occur in high use areas, at all vehicle access points, and around former vehicle routes. An inventory of new foot-worn hiking paths would be maintained and monitored for resource damage. Monitoring would identify paths with different levels of trampling, leading to primitive camping areas, cut vegetation, or other evidence of use.

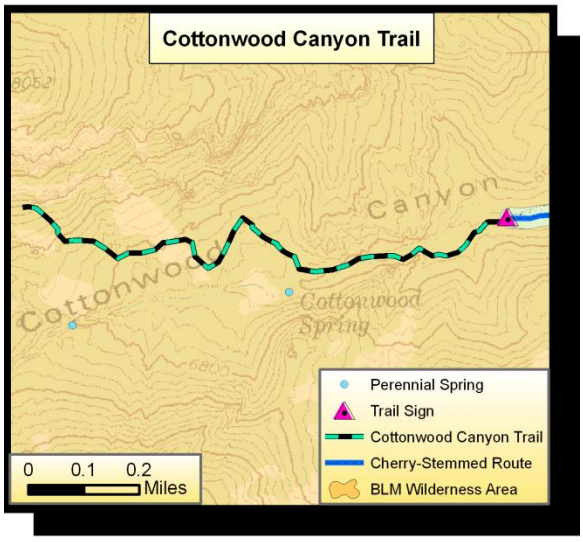
As new foot-worn paths are discovered, they would be evaluated for impacts to wilderness character (including archaeological and biological resources) and the management objectives of this Plan. When appropriate and where possible, new foot-worn hiking paths would be rehabilitated or retained (See Trail Guidelines, Page 83). When a foot-worn hiking path is retained, it may be rerouted, improved, or maintained to follow designated trail guidelines as outlined below to make the trail compatible with protecting resources while preserving the wilderness character. If not designated as a trail, or retained as a foot-worn hiking path, new trails would be rehabilitated.

Trail Guidelines: Both designated trails and, when determined appropriate, informal foot-worn paths may be maintained or rerouted where they are causing or anticipated to cause damage to wilderness character. Examples for when trail maintenance or rerouting would occur include:

- Slopes greater than 15 percent, beyond which potential for excessive soil erosion and trail deterioration is high. Very short, steep sections may be retained where reinforcement with native rock would prevent soil erosion. Rolling dips or rock-enforced water bars would be utilized to reduce water caused soil erosion.
- Where trail braiding or duplicate routes exist or are beginning to occur, the most appropriate trail would be selected by improving its tread surface or trimming back vegetation. The alternate trail(s) would be obstructed and rehabilitated with rock or native vegetation.
- Maintenance would strive to limit trail width to 24 inches, but not exceed 36 inches except for trail sections along precipices (where it may be wider for safety and horse use) or in washes. Width standards are applied to continuous segments longer than 50 feet. Tree limbs or fallen trees may be cleared within ten feet high and four feet to either side of trail (cutting limbs at trunk) or, where practical, minor trail relocation to avoid the tree.
- Trails may be rerouted to avoid damage to natural or cultural resources.

Site-Specific Proposed Action

The Cottonwood Canyon Trail in the Fortification Range Wilderness would be designated as a hiking and equestrian trail to accommodate the high visitor use levels in that area. The trail would begin and be marked on the ground at the end of the cherry stemmed-route. The trail would be approximately one mile in length and would be located predominantly on an existing wild horse and/or livestock trail. Some small changes may be made to this existing trail in order to meet the listed standards on the following page for trail guidelines and to avoid potential issues in the Cottonwood Spring riparian area (See EA Map 2 Page 67).



Alternative 1

No trails would be designated or constructed.

Alternative 2: No Action

Former vehicle routes totaling 30.5 miles ─ 9 miles in the Fortification Range Wilderness, 10.7 miles in the Parsnip Peak Wilderness, and 10.8 miles in the White Rock Range Wilderness ─ would be treated as foot-worn hiking paths and would be rehabilitated according to existing BLM policy. Cattle, wild horse, or game trails would also be treated as foot-worn paths. These paths would not be displayed or described on BLM maps or brochures and would be monitored according to existing BLM policy.

Cottonwood Canyon in the Fortification Range Wilderness

General Recreation Activities

Proposed Action

A variety of primitive and unconfined recreational activities are likely to occur in all three wilderness areas. Management actions that may be initiated in response to recreational impacts include, but are not limited to:

- Public outreach and education in Leave No Trace principles to encourage minimum impact practices.
- Provide information to the public on non-wilderness recreational opportunities in the region.
- Establish protective areas around sensitive resources where recreation activities may be restricted.
- Closure of areas to recreation activities.
- Campsite management to maintain use at existing sites and prevent unmanaged site expansion or new site establishment.

Hunting and trapping are permitted in wilderness, subject to applicable State and Federal laws and regulations. Shed antler collection would be permitted for personal use only. These activities are and would likely continue to be popular. The creation or construction of permanent blinds in wilderness areas and wilderness study areas is not allowed (43 CFR 6302.20(f) and IMP Handbook H-8550-1, Chapter I.B.2. and 3.). However, portable or "pop-up" blinds may be temporarily allowed for hunting, photography, wildlife observation and similar purposes for a period of fourteen (14) days if they are packed or carried in and out and do not require the disturbance or destruction of native soil, rock, or vegetation.

Portable and "pop-up" blinds must be attended or occupied at least some portion of a ten day period within the 14 day period of use. If blinds are not attended or occupied for 10 days, they will be considered unattended property and/or permanent structures and will be subject to removal by the BLM (43 CFR 8365.1-2(b)) and subject to disposition under the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 484(m)).

Traditional geocaching and letterboxing would not be allowed, however virtual geocaches would be an accepted activity within wilderness. Traditional geocaches and letterboxes would be removed when encountered, and visitors wishing to participate would be directed to locations outside wilderness.

Recreational horseback riding and use of pack stock animals would be permitted both on and off trail. Other than incidental browsing, riding and pack stock animals may only be fed with packed-in, certified weed-free feed.

According to BLM Wilderness policy, any fuelwood cutting in wilderness would be limited to dead and down material.

Alternative 1

Unattended hunting blinds discovered by BLM personnel in these wilderness areas would be treated as unattended personal property, removed immediately, and if not constructed of natural materials, temporarily held at the Ely District Office or Caliente Field Office.

Casual geocaching would be allowed through a letter of agreement with special stipulations to prevent damage to the wilderness resource. A separate environmental assessment would be prepared for each letter of agreement. Development of foot-worn hiking paths to and around the geocache or degradation of the wilderness character would be monitored. Should development of a foot-worn hiking path begin, or other resource damages occur, the letter of agreement would be revoked and the geocache removed. "Virtual" geocaching (no physical cache is present) may occur without a letter of agreement, but if site monitoring indicated development of foot-worn hiking paths, degradation of the wilderness character or damage to other resources, the geocache sponsor would be requested to remove any site postings from the internet.

Alternative 2: No Action

No specific actions would be taken regarding general recreational activities. Hunting and trapping are permitted subject to applicable State and Federal laws and regulations. If a geocache or letterbox is discovered the BLM would remove it and request that the geocache or letterbox sponsor removes the listing from the internet.

Camping

Proposed Action

Backcountry camping would be allowed. Occupying a campsite would be allowed for up to 14 days. Should a visitor wish to camp longer than 14 days, their camp must be relocated a minimum of 25 miles from the previous site. If monitoring shows that the 14-day stay limit is leading to unacceptable resource impacts, site stay limits of less than 14 days could be implemented. Campfires would be allowed except under fire hazard restrictions. Visitors would be allowed to collect dead and down fuelwood for personal campfires during their trip. Leave No Trace camping techniques would be encouraged through literature and BLM-sponsored Leave No Trace public workshops. If more than two campsites (identified by the presence of a campfire rock ring) are identified within a quarter mile of each other, the least impacted site would be restored to a natural condition to minimize additional camping disturbance. Campsites closer than 300 feet to sole water sources would also be removed, in compliance with state regulations.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

This alternative differs from the proposed action in that campsites would not be moved or rehabilitated.

Objective	Maintain existing opportunities for solitude by managing visitor use patterns if monitoring indicates a need.

Solitude

Proposed Action

These wilderness areas currently enjoy outstanding opportunities for solitude, thus numeric standards for frequency of visitor encounters or group size limits would not initially be established. Large groups inquiring about recreational opportunities would first be directed to locations outside of wilderness, while small groups may be directed to locations within wilderness. If this wilderness character of solitude becomes degraded

over the life of this Plan, the following management actions, in order of priority, may be initiated:

1. Educate visitors concerning Leave No Trace recreation ethics to reduce conflict with other visitors.
2. Provide information to the public on non-wilderness recreational opportunities in the region.
3. Establish a group size limit of 12.
4. Increase difficulties of access (reduce maintenance levels on access points and boundary roads, limit available public information, limit parking availability, etc.)
5. A combination of the above methods.
6. Plan revision with additional public input to reassess these standards and/or implement more direct controls.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

No management actions would be taken to maintain opportunities for solitude.

Welded Volcanic Tuft in the Parsnip Peak Wilderness

Objective	Provide for vehicle access to the boundaries of the wilderness areas while also deterring vehicles from entering into the wilderness areas.

Vehicle Access and Staging Areas

Proposed Action

Currently, there are numerous heavily used access points. Access points are defined as locations along wilderness boundaries where focused access occurs. Over time, these and other areas used for parking along boundary roads may be impacted to the point at which improvements should be made in order to protect wilderness character. Vehicle turn-arounds would occupy no more than 0.5 acres each, would not extend into the wilderness, and would be limited to within a 100-foot boundary offset.

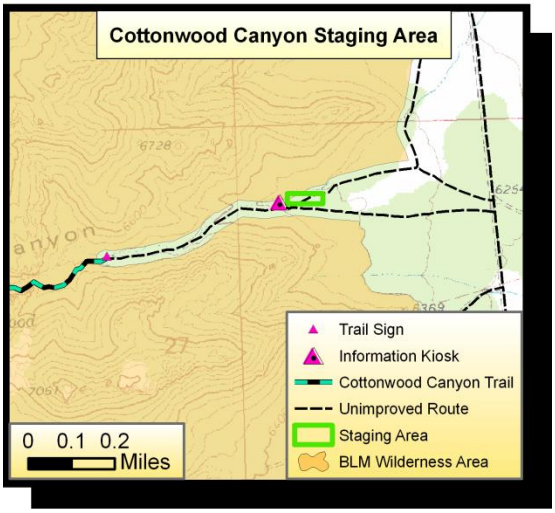
Staging areas would be constructed when necessary to accommodate visitation and protect wilderness character. The area of disturbance would be no more than two acres and would not extend into the wilderness. Vehicle barriers would be constructed outside of wilderness where natural obstacles are not adequate to prevent vehicles from crossing into wilderness. Implemented barriers could include the following:

- Wilderness sign, berm associated with turn-around, small rocks and/or vegetation placement or restoration.
- Large boulders moved by heavy equipment.
- Posts.
- Fence or gates.

Where feasible, roads adjacent to and accessing the wilderness areas, such as cherry-stem and administrative routes, would be maintained in the condition that existed at the time of wilderness designation. Using a trail maintenance approach, the installation of water bars to control the flow of water, as opposed to blading or culvert installation, would be utilized.

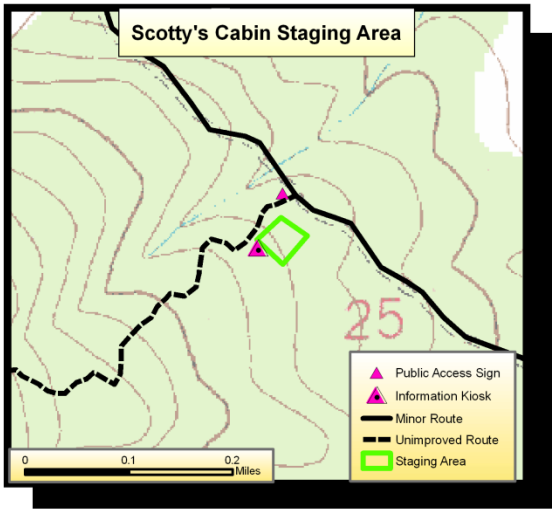
Site–Specific Proposed Action

Staging areas would be designated at the beginning of the Cottonwood Canyon cherry stem of the Fortification Range Wilderness and at the intersection of the main dirt road and the Scotty's Cabin access route of the White Rock Range Wilderness.



The Cottonwood Canyon Staging Area would remain within the 200-foot non-wilderness corridor and would initially be identified by wilderness boundary markers

at key locations unless future use necessitates the installation of vehicle barriers. The staging area would accommodate vehicle turnaround and include installation of an information kiosk.



The existing disturbance at the site of the Scotty's Cabin Staging Area would be improved to facilitate parking and OHV unloading. The staging area would include a public access sign and a map of the White Rocks Wilderness Area. The staging area would initially be approximately 150 feet by 150 feet, but this size may change over time to accommodate increased use.

The OHV trail accessing Scotty's Cabin is the only feasible public access to the eastern side of the White Rock Range Wilderness. It is used heavily during Nevada's hunting season and moderately during the rest of the year. The existing access route is located on BLM land administered by the Cedar City, Utah Field Office. From the staging area, 0.75 miles of the route was initially created by a bulldozer to be used as a fire line for the Coyote Fire in 2000; it has since been used as an OHV trail to avoid private property and access an existing historical jeep trail to Scotty's Cabin. This access route would be the main access route to the White Rock Range Wilderness and, as with other access routes, would be maintained at the current level of access using a trail maintenance approach.

Also see EA Map 2 for the Cottonwood Canyon Staging Area and EA Map 4 for the Scotty's Cabin Staging Area (Pages 67, 69).

Alternative 1

The difference from the proposed action is that the Scotty's Cabin staging area would not have a public access sign installed.

Alternative 2: No Action

Visitors would be able to park their vehicles and access wilderness from any public point outside of the wilderness boundary. No vehicle staging areas would be designated or defined to direct recreational use to most desired and suitable access points.

Objective	Emphasize education and interpretation to manage visitor activities over regulations.

Environmental Education and Interpretation

Proposed Action

General interpretive information regarding natural and cultural resources and recreation opportunities in wilderness would be located on kiosks outside of wilderness, in brochures, on BLM land status and recreation maps, and at the BLM Ely Field Office website. Wilderness-specific maps would include wilderness area descriptions, designated trails, interpretive information, as well as wilderness ethics and Leave No Trace principles. There would be no interpretive trails designated.

When feasible the BLM would collaborate with other agencies and non-government organizations in the presentation of basic information. This could include authors of media or guide books.

Public outreach for Leave No Trace recreation ethics would be emphasized using classes and workshops presented at local schools and in the field. A separate wilderness public education plan would be developed for programs related to all designated wilderness in Lincoln County.

Alternative 1

Information emphasized on kiosks would be wilderness laws, regulations, and penalties for non-compliance.

Alternative 2: No Action

The BLM is currently developing a wilderness public education plan for programs related to all designated wilderness in Lincoln County. This plan would be implemented without the guidance of a comprehensive wilderness management plan.

Sign Plan

Proposed Action

Wilderness boundaries would be identified by markers at key locations. Informational kiosks would provide wilderness, natural and cultural resource interpretive information, and would include visitor surveys and survey collection boxes. No directional signs would be placed on trails within wilderness. Signs outside of wilderness would not direct visitor use toward sensitive resources and in some cases, may specifically direct visitors away from sensitive resources. Additional kiosks and signs would be installed to adaptively manage for changing needs.

Site-Specific Proposed Action
Kiosks would be installed at the Cottonwood Canyon Staging Area of the Fortification Range Wilderness, the Scotty's Cabin Staging Area of the White Rock Range Wilderness and along the road through Camp Valley between the Parsnip Peak and White Rock Range Wilderness Areas.

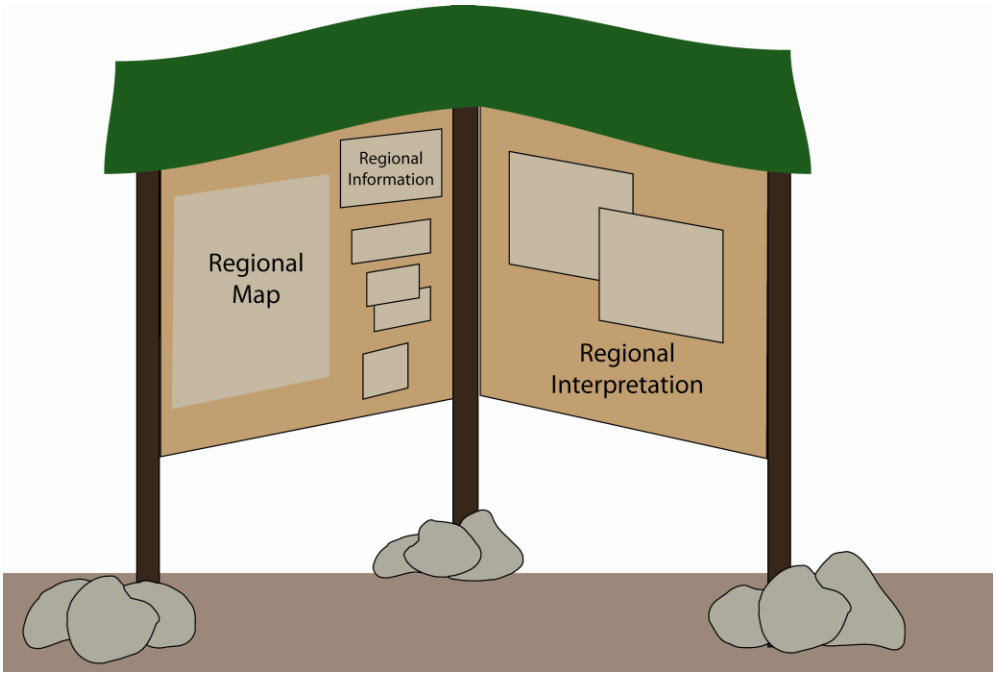
Information regarding wilderness in Lincoln County, with specific focus on the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas, would be displayed on a large kiosk at Spring Valley State Park. A sign indicating public access to the White Rock Range Wilderness would be installed at the intersection of the main dirt road and the access route to Scotty's Cabin. See EA Maps 2, 4 and 7 for kiosk and sign locations (Pages 67, 69 and 92).

Alternative 1

For trails designated in the future, directional markers would be installed on all designated trails but not on foot-worn hiking paths that are retained and maintained by the BLM. Signs would display interpretive information regarding sensitive resources, and they would emphasize wilderness laws, regulations, and penalties for non-compliance. A sign indicating public access to the White Rock Range Wilderness would not be installed.

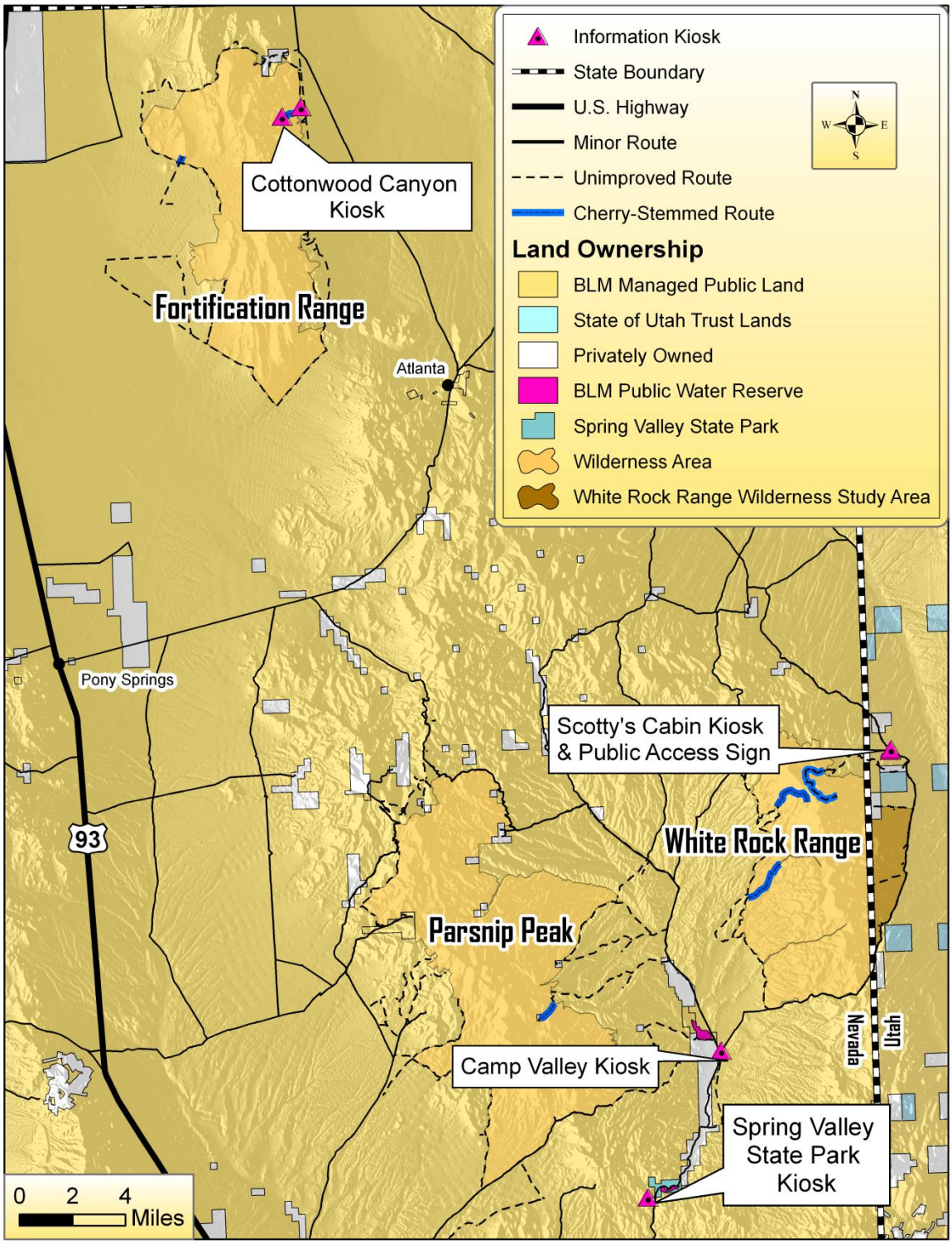
Alternative 2: No Action

Only current wilderness boundary markers would be maintained.



Sample two panel kiosk

EA Map 7: Kiosk and Sign Locations



Research

Proposed Action

Research proposals investigating indigenous plant communities, wildlife, archaeological resources, and the human dimensions of wilderness would be considered. Proposals must contribute to the enhancement of wilderness character or the improvement of wilderness management. All proposals would be subject to the restrictions and guidelines of the Wilderness Act (1964), LCCRDA (2004), the BLM–NDOW MOU, as well as appropriate guidelines outlined in the Wilderness Management Plan preceding this EA.

Research proposals that do not contribute to the improved management of the area as wilderness would not be permitted if they can be accomplished outside of the wilderness areas and/or they cannot be conducted in a manner compatible with the preservation of the wilderness environment.

Research and other studies must be conducted without use of motorized or mechanized equipment or construction of temporary or permanent structures. Exceptions may be approved for projects that are essential to managing the specific wilderness areas when no other feasible alternatives exist. Such use must be necessary to meet the minimum requirements for administration of the area as wilderness and must not degrade wilderness character. A site-specific NEPA analysis would have to be prepared for the authorization of any exceptions.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Scientific research proposals would be considered that adhere to current laws, policies, and guidelines, but would be implemented without the guidance of a comprehensive wilderness management plan.

Objective	Allow for special provision land uses determined by the Wilderness Act or Lincoln County Conservation, Recreation and Development Act while minimizing developments, degradation to naturalness, and other impacts to wilderness resources.

Livestock Grazing

Proposed Action

Grazing would continue under federal regulations to meet the Mojave – Southern Great Basin Resource Advisory Council Standards. Planning related to grazing operations

would be guided by the Congressional Grazing Guidelines (House Report 105-405 Appendix A, 1990) and the BLM Manual 8560 (Management of Designated Wilderness Areas).

Activities and the necessary facilities used to support livestock grazing would be permitted to continue in wilderness. The following excerpt from the Congressional Grazing Guidelines (House Report 101-405, 1990) provides direction for facilities maintenance and use of motorized equipment in wilderness:

"The maintenance of supporting facilities, existing in an area prior to its classification as wilderness (including fences, line cabins, water wells and lines, stock tanks, etc.) is permissible in wilderness. Where practical alternatives do not exist, maintenance or other activities may be accomplished through the occasional use of motorized equipment….Such occasional use of motorized equipment should be expressly authorized in the grazing permits for the area involved. The use of motorized equipment should be based on a rule of practical necessity and reasonableness….Moreover, under the rule of reasonableness, occasional use of motorized equipment should be permitted where practical alternatives are not available and such use would not have a significant adverse impact to the natural environment. Such motorized equipment uses will normally only be permitted in those portions of a wilderness area where they had occurred prior to the area's designation as wilderness or are established by prior agreement."

Current known range developments, as well as any range developments discovered may be kept and maintained. Developments would be removed if deemed unnecessary by the BLM and permittee following periodic evaluations or when there is a grazing permit renewal or transfer. The installation of new range developments is allowed in accordance with the Congressional Grazing Guidelines and pending project-specific NEPA analysis.

Range developments that appear to have been abandoned would receive an administrative record review and additional field reconnaissance in order to determine usage. The relevant BLM rangeland management specialist and archaeologist would be consulted to determine if historical or cultural designation is warranted. If it is determined, after consultation with the permittee, that a development is abandoned and not of historical or cultural value, it would be removed by BLM personnel or authorized volunteers. Range developments for which questions of activity exist would be evaluated during the livestock operators' term permit renewal process.

Routine livestock management activities and maintenance of supporting facilities (e.g. small salt drops and fence repairs) would be accomplished by foot or horseback as needed. Motorized vehicles may be authorized for major maintenance when transporting equipment or parts which cannot be accomplished by foot or pack stock. Specific maintenance requirements and schedules would be established by the permittee, range specialist, and wilderness specialist during permit renewal and would be stated as a term or condition of the grazing permit.

Approved motorized access would be confined to established administrative access routes. These would be managed for limited use by the permittee. A gate or bollard, signed as administrative access, could be installed at the start of select administrative access routes to prevent unauthorized vehicle use. The permittees and BLM staff would maintain access keys. Administrative access routes would not be decommissioned; they may be maintained on a case-by-case basis in order to provide reasonable access for permittees.

In the case of an emergency such as rescuing sick animals or placement of feed, the permittee would be authorized to use motor vehicles in addition to their scheduled range development maintenance and livestock management access provided the permittee notifies the BLM at the onset of the emergency or immediately thereafter. This would be stated as a term or condition of the grazing permit.

Range Development in Fortification Range Wilderness

Site-Specific Proposed Actions

The 15 known range developments would be kept and maintained. EA Map 8 (Page 97) shows existing range developments in the wilderness areas. Routine activities and facilities maintenance in association with these developments would be performed by foot or horseback. Motorized vehicles may be authorized for major maintenance when transporting equipment or parts which cannot be accomplished by foot or pack stock.

Five administrative access routes would be permitted and managed for use by the permittee on a limited basis. EA Table 1 and EA Maps 2─3 (Pages 96, 67─68) describe and depict administrative access routes and their associated access need (i.e. range development maintenance and salt drop). The approved administrative access routes would be located in existing former vehicle routes; these routes would not be

decommissioned and may be maintained on a case-by-case basis in order to provide reasonable access for permittees. Motorized access would be confined to these established administrative access routes.

Alternative 1

The occasional use of motorized vehicles for major maintenance would be authorized on a case by case basis instead of being previously authorized as a term of the grazing permit. No specific administrative access area would be designated.

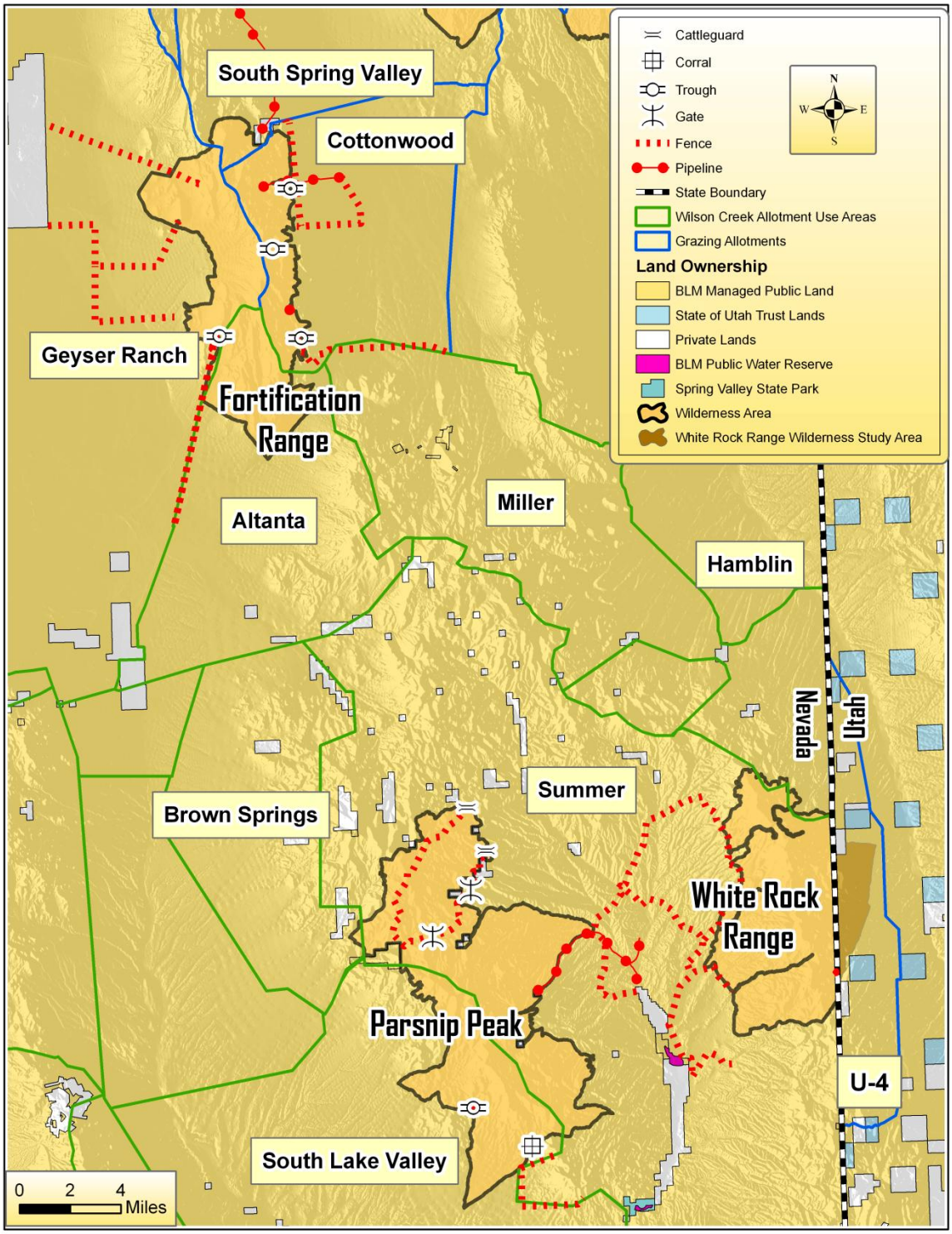
Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

EA Table 1. Proposed Action Administrative Access Routes.

Wilderness	*Allotment*	*Use Area*	*Administrative Access Type*	*Access Need*	*Access Location*
Fortification Range	Wilson Creek	Atlanta	Route	Salt Drop	T. 07N, R. 67E, Sec. 22.
Fortification Range	Cottonwood	-	Route	Range Development Maintenance	T. 08N, R. 67E, Sec. 3.
Fortification Range	Geyser Ranch	-	Route	Range Development Maintenance (Spring)	T. 08N, R. 67E, Sec. 29.
Parsnip Peak	Wilson Creek	Summer	Route	Salt Drop	T. 04N, R. 68E, Sec. 12.
Parsnip Peak	Wilson Creek	Summer	Route	Range Development Maintenance	T. 05N, R. 68E, Sec. 35.

EA Map 8: Existing Grazing Allotments and Range Developments



Objective	Maintain or enhance the natural appearance of the wilderness areas by removing unnecessary facilities and minimizing or restoring human-caused surface disturbances.

Rehabilitation of Small-Scale Surface Disturbances

Proposed Action

Small-scale surface disturbances include abandoned developments, dispersed campsites, mining claims, and linear disturbances created by motorized vehicle traffic that are largely denuded of vegetation. Rehabilitation seeks to restore disturbances to their natural vegetative condition. Except for designated administrative access, all former vehicle routes, including future incursions, would be decommissioned, and rehabilitated. Based on monitoring results repeat rehabilitation treatments may occur. These routes are displayed on EA Maps 2─4 (See Pages 67─69). Artificial barriers consisting of natural materials may be placed outside of wilderness to facilitate successful long term rehabilitation. Environmental Assessment NV-040-05-010 (Wilderness Disturbance Reclamation) may be referenced for disturbance reclamation.

Former Vehicle Route in the Parsnip Peak Wilderness

Work would be completed by BLM staff, contractors, and volunteers and would be done outside migratory bird breeding and nesting seasons unless a survey is done and there is no breeding or nesting activity occurring in the vicinity of the projects. All crews would be furnished with maps depicting the wilderness boundaries and would be trained in the use of required tools and equipment as well as awareness of any unique wildlife, plant, cultural, and wilderness resources. All personnel involved would be provided with cultural observation reports prior to reclamation activities. All vehicles would be limited to designated and existing roads outside of designated wilderness. **All actions in wilderness would be conducted with non-motorized equipment and non-mechanized transport.** A few of the following procedures are similar but not directly related to Emergency Stabilization and Rehabilitation procedures and implementation would generally be conducted in the following order:

1. Decompaction: Working the top few inches of the entire disturbed surface to relieve soil compaction. This action would be completed with the use of soil spades, spading forks, McCloud rakes, pulaskis, shovels, horse-drawn implements, etc.

2. Scarifying/Pitting: Loosening and texturizing the impacted, disturbed surface in random locations to better capture water, organic debris and wind-blown seeds, thereby stimulating natural revegetation.

3. Recontouring: Reconfiguring/shaping involves the creation of small hummocks and banks, where appropriate, to mimic the surrounding landscape. Berms would be pulled in and the soil distributed across the disturbed surface. Vehicle tracks in sandy washes would be raked. This would lessen visual contrasts and provide a surface for natural revegetation.

4. Vertical Mulching: Dead and down vegetation is "planted" to obscure the visible portions of the disturbance and is obtained from adjacent areas. Additional dead vegetation, rock material and other organic matter may be distributed over the worked surface to decrease visual contrasts, create sheltered sites to aid in natural revegetation, and add organic debris.

5. Erosion Control: Placing sterile weed-free straw bales or creating light terracing/berms to reduce erosion and create barriers to vehicles on steep slopes. This is especially effective on hill climbs. The straw bales break down over time and provide additional organic debris to the reclamation site.

6. Vegetative Restoration: This would involve planting, transplanting and/or seeding as necessary to help stabilize soil, speed overall vegetative recovery and camouflage evidence of disturbances. All seed would be locally collected or native species scattered on reclaimed surfaces to accelerate natural revegetation. This action would be completed by non-motorized hand tools.

Rehabilitation locations would be monitored for future unauthorized motorized use and may require repeat rehabilitation.

Entities (e.g. individual, agency or company) creating large surface disturbances, such as those that may be caused by heavy machinery, would be responsible for developing a rehabilitation plan and conducting necessary environmental analysis.

Site-Specific Proposed Action
Currently there are 68 disturbances totaling 30.5 miles which is approximately 30.5 acres of surface disturbance. Based on monitoring results repeat rehabilitation may occur; 27.2 (does not include administrative access routes) miles would be rehabilitated according to the standards and processes described above: 8.4 miles in the Fortification Range Wilderness, 8.0 miles in the Parsnip Peak Wilderness, and 10.8 miles in the White Rock Range Wilderness (See EA Maps 2─4, Pages 67─69).

Alternative 1

There are 30.5 miles of former vehicle routes in these wilderness areas that would be rehabilitated (no administrative access routes): 9.0 miles of former routes in the Fortification Range Wilderness, 10.7 miles in the Parsnip Peak Wilderness and 10.8 miles in the White Rock Range Wilderness; they are depicted in EA Maps 5─6 (See Pages 70─71). Sections of these disturbances that are visible from outside of wilderness boundaries would be rehabilitated according to the standards and processes described above.

Alternative 2: No Action

No active rehabilitation would occur, as a result, routes would rehabilitate by themselves.

Structures, Installations and Other Human Effects or Disturbances

Proposed Action

Summit registers would not be removed. Other structures and installations may be removed if they are not the minimum necessary for the administration of the area as wilderness, or if they are not associated with a prior use or valid existing right.

Wilderness staff and volunteer monitors would be given instructions on the identification of human effects that would be considered unattended personal property or refuse. Unattended personal property not associated with an active camp, including geocaches, would be removed by BLM personnel upon encountering it, and temporarily held at the BLM Ely District Office or Schell Field Office. If possible, the owner of the personal property would be contacted. In the case of a traditional geocache, the BLM would request that it be removed. In the instance that a virtual geocache identifies a sensitive site, the sponsor will be asked to remove the site from the internet. Human effects for

which questions of age exist would be photographed for further consideration by the archaeologist. Historic and prehistoric artifacts would not be disturbed unless some disturbance is necessary for preservation of the resource or to promote wilderness character.

Where mine adits or shafts are found in these wilderness areas, they could be closed in order to promote wilderness character and public safety using conforming actions such as, but not limited to, hand tools and dynamite filling. NEPA and Minimum Requirements Decision Guide (MRDG) analyses would be required for non-conforming actions including, but not limited to, bulldozers and bat gates. If mine adits or shafts are proposed for closure, bat surveys would be necessary.

Alternative 1

The only difference from the proposed action is that personal property would not be removed for 14 days.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Objective	Assess potential commercial uses of the wilderness areas for their economic importance and prevent negative impacts on wilderness characteristics.

Commercial Services Restrictions and Guides and Outfitters

Proposed Action

Section 4(c) of the Wilderness Act prohibits commercial enterprises within wilderness, with the exception of those commercial services listed in Section 4(d) of the Wilderness Act (1964). Commercial enterprises, particularly those that are not wilderness-dependent or do not contribute to wilderness character or public education thereof, including for-profit pine nut harvesting, would be prohibited. Conducting these activities for personal use would be allowed. Section 4(d) (6) of the Wilderness Act allows for commercial services to the extent necessary for activities that are suitable for recreational or other wilderness purposes. Commercial guiding would be permitted for:

- Hunting.
- Academically-oriented organizations whose primary purpose is wilderness or environmental education.
- Organizations whose service is primarily for the support of people with disabilities.

Guides would be subject to the same regulations as other visitors to the wilderness areas. Regulations for guides and outfitters would be in conformance with the BLM Ely District Resource Management Plan (RMP), the Wilderness Act (1964), and LCCRDA (2004). Limits on the number of commercial guides may be implemented if monitoring identifies excessive impacts to wilderness character or resources.

Alternative 1

The number of commercial services allowed to operate would be limited to pre-wilderness designation numbers.

Alternative 2: No Action

The number of commercial services allowed to operate would not be limited and therefore could be greater than the proposed action.

Objective	Implement proposed actions as necessary to meet minimum requirements for the administration of the areas as wilderness and to have the least impact to wilderness characteristics.

Military Operations

Proposed Action

Military training exercises would not be located within the three wilderness areas. Guidelines for handling military operations would distinguish between non-emergency and emergency situations. Non-emergency incidents might include such activities as the release of flares, the recovery of aircraft parts, or the salvage of non-operational ordinance. Emergency situations may include, but are not limited to, the retrieval of downed aircraft, the rescue of pilots, or the recovery of live ordinance.

Non-emergency military actions **may** be approved on a case-by-case basis following MRDG analysis, environmental assessment, and authorization from the Ely BLM District Manager. The Ely District Office Noxious Weed Prevention Schedule (i.e., equipment inspection and washing, recording of wash-down sites, notification of the weeds coordinator, and avoidance of noxious weed infestation areas) will be utilized for non-emergency actions, as will Leave-No-Trace principles. All evidence of human activity would be removed to the maximum extent possible.

Emergency military actions involving prohibited uses identified in Section 4(c) of the Wilderness Act (1964) (e.g. motorized vehicles and mechanized equipment, mechanical transport, landing of aircraft etc.) will be permitted within wilderness without prior analysis, assessment, or authorization provided the 99CES/CC (Commander of the Civil

Engineering Squadron of the 99th Airbase Wing at Nellis Air Force Base) notifies the Ely BLM District Manager at the onset of the emergency or immediately thereafter.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Water Rights

Proposed Action

The BLM would seek to acquire additional water rights within the wilderness areas in accordance with Nevada state water law. Existing water rights may be purchased from willing sellers or shared with other agencies through cooperative agreements. The BLM may also file application for additional water rights where water in excess of existing permitted rights can be shown to exist. Water rights would only be used to sustain riparian habitat, provide water to wildlife, or support recreation. All water rights actions would be in conformance with LCCRDA (2004) and the Nevada Revised Statutes.

Alternative 1

There are no differences from the proposed action.

Alternative 2: No Action

Current laws, policies, and guidelines would be followed without the guidance of a comprehensive wilderness management plan.

Alternatives Considered but Eliminated from Detailed Analysis

Site-Specific Wild Herd Management

A restoration project for the riparian area associated with the seep of Coal Burner Spring located within Parsnip Peak Wilderness was discussed extensively during the internal scoping process. An existing pipeline pulls water from the natural source of the spring to a tank located outside of the wilderness boundary. The spring is perennial, and flow is great enough in the spring that water seeps from the source in addition to filling the tank. During this time wild horses create a large muddy area denuded of vegetation at the spring source. This project was eliminated from this analysis because a determination

was made that a separate BLM interdisciplinary team would be necessary to provide the appropriate type and level of analysis to address this problem.

Fire Suppression Guidelines

Designating specific locations for base camps, helispots, helibases, and staging areas was considered in order to choose sites that would be minimally impacted by this activity. This alternative was eliminated from detailed analysis because it would be impossible to predict where these sites would best be located in relation to any fires that may occur.

Trails

Designating all former vehicle routes as trails was considered but eliminated from analysis because a majority of the former routes would not access any points of interest, and protecting the undeveloped quality of the wilderness character is a higher priority for wilderness management than providing more trails for recreational opportunities.

General Recreation Activities

Trapping was a major issue discussed during internal scoping. There is a regional concern about traps being set at public sites and points of interest, which could compromise the safety of visitors to these sites. NDOW trapping regulations state that "it is unlawful to remove or disturb the trap of any holder of a trapping license while the trap is being legally used by him on public land or on land where he has permission to trap" (NDOW HUNT BOOK p.45). It was suggested that this Plan and Environmental Assessment should include restrictions against the setting of traps at public sites in these wilderness areas to protect visitor safety and that a time limit be placed on structures associated with trapping to protect the undeveloped quality of wilderness character. Both of these suggestions were considered outside the scope of this Plan and Environmental Assessment and were not analyzed in detail.

Camping

Designating a shorter stay limit than the BLM-standard 14 days for these wilderness areas was discussed during internal scoping, but it was determined unnecessary at this time since these areas are so little used and impacts of visitors staying 14 days would not be so severe to necessitate shorter stay limits.

Solitude

Zoning these wilderness areas to manage for solitude was considered but eliminated from analysis because it was determined that these areas do not receive enough visitation and are not likely to receive enough visitation over the life of the Plan to justify such zoning.

Vehicle Access and Staging Areas

It was suggested during public scoping that the southern boundary road of the Parsnip Peak Wilderness and the road to Reeds Cabin Summit on the southeastern boundary of the White Rock Range Wilderness need to be "well-maintained" or "well-improved." This was eliminated from analysis because it was considered unnecessary for the provision of access or the promotion of wilderness character at the time of development of this Plan and Environmental Assessment.

The possibility of paving roads to access points and cherry stems was discussed in order to facilitate ease of access to these wilderness areas and possibly to accommodate recreational vehicles. Paving was eliminated from analysis because it was determined that such development would negatively impact the character of the areas surrounding wilderness and could cause some ancillary impacts on wilderness character.

Two private parcels that are edge-holdings on the Parsnip Peak Wilderness were discussed during public scoping. Private land in T. 4N, R. 68E, Sec. 14 was accessed by motorized vehicle prior to wilderness designation via a former vehicle route that led to a wash and onto the property. Private land up Cole Wash, in T. 4N, R. 68E, Sec. 25 and Sec. 26 was accessed by cross-country motorized travel over land that was designated as wilderness. The possibility of issuing a land use permit for rare but scheduled motorized access to these private properties was discussed, but eliminated from analysis because it was determined to be inconsistent with the Wilderness Act. These parcels can be accessed by foot or horseback, and the private property owner on T. 4N, R. 68E, Sec. 14 has the ability to propose the construction of a road across non-wilderness BLM land to access the property. This would require site-specific NEPA analysis, and is considered outside of the scope of this Plan and Environmental Assessment.

The closure of cherry-stemmed routes was discussed, but eliminated from analysis because it was determined that no cherry stem closures are necessary based on the level and type of wilderness area use during the development of this Plan and Environmental Assessment.

Structures, Installations and Other Human Effects or Disturbances

Installation of a temporary fence around the existing mine adits in the Parsnip Peak Wilderness until a proposal for the full closure of the adits could be analyzed was considered during internal scoping. The purpose of the fence would be to protect visitor safety. The mine adits currently affect the natural and untrammeled qualities of wilderness character, and a fence would further affect these qualities. Mine reclamation is being considered under a separate Environmental Assessment; therefore, this project was eliminated from this analysis.

Guides and Outfitters

The possibility of restricting outfitter and guide services to certain campsites and assigning which services may use which sites was discussed in internal scoping in order to prevent conflicts between guide services and to limit the number of guide services able to operate in a given part of these wilderness areas. This restriction was eliminated from analysis because it was determined that it could be too limiting on guide service operations.

Other Wilderness Management Issues

The development of a list of tools that could be used in these wilderness areas was proposed during internal scoping. This list would determine what tools could be considered the minimum necessary tool under specific circumstances. Developing this list was eliminated from detailed analysis because it was determined that so doing would too greatly restrict the ability of future planners to conduct site-specific minimum tool analyses for proposed projects.

Chapter Three

The Affected Environment and Environmental Consequences

Description of the Affected Environment

The three wilderness areas covered by the Proposed Action are located in Lincoln County in the Great Basin ecoregion. The critical elements of the human environment, as identified by the BLM Manual 1790-1, are listed in EA Table 2. Elements that may be affected are further described in this Environmental Assessment. Rationales for those elements that would not be affected are also listed in EA Table 2. These critical elements will not be considered further in this document.

EA Table 2. Critical Elements of the Human Environment and Rationale for Detailed Analysis for the Proposed Action.

Critical Element	No Effect	May Affect	Not Present	Rationale
Air Quality	X			**Activities proposed within the three wilderness areas would not create increases in air pollutant concentrations.**
Areas of Critical Environmental Concern			X	**Resource is not present.**
Archaeological Resources and Historic Properties		X		**Proposed Action may enhance preservation of cultural resources.**
Environmental Justice	X			**No minority or low-income groups would be affected by disproportionately high and adverse health or environmental effects.**
Farm Lands (Prime or Unique)			X	**Resource is not present.**
Flood Plains			X	**Resource is not present.**
Migratory Birds	X			**Following the BLM interim management guidance for the Migratory Bird Treaty Act would prevent impacts to migratory birds.**
Native American Religious Concerns	X			**There are no known issues of concern to local tribes.**

Critical Element	No Effect	May Affect	Not Present	Rationale
Noxious and Non-Native Invasive Weeds		X		**Surface disturbances for route rehabilitation may increase risk of non-native, invasive species establishment. Control measures may reduce noxious species.**
Riparian Areas and Wetlands		X		**Control measures on tamarisk and Russian olive may enhance riparian areas. Users of the proposed Cottonwood Canyon Trail would affect an adjacent riparian area.**
Special Status Species		X		**Designation or rehabilitation of trails, trailheads, and access points may impact some individual species.**
Threatened or Endangered Species			X	**No threatened or endangered species occur in the planning area.**
Wastes (Hazardous or Solid)	X			**Human waste may be generated during visitor use of the areas. Proposed monitoring would track this element, and public education and adaptive management would manage for this element to protect Wilderness characteristics and natural resources.**
Water Quality (Drinking)	X			**Drinking water sources would not be encountered.**
Water Quality (Ground)	X			**Ground water sources would not be encountered.**
Wild Horses and Burros		X (Horses)	X (Burros)	**Wild horses may be temporarily displaced by elements of the Proposed Action. Burros are not present.**
Wild and Scenic Rivers			X	**Resource is not present.**
Wilderness		X		**Proposed actions are for the management of wilderness areas.**

In addition to the Critical Elements of the Human Environment, the BLM considers other resources that occur on public lands, or issues that may result from the implementation of the Proposed Action. The potential resources, uses, and issues that may be affected are listed in EA Table 3 (See Page 109). A brief rationale for either considering or not considering the issue or resource further is provided. The resources and issues that are considered in the Environmental Assessment are described in this chapter starting on Page 110.

EA Table 3. Other Resources and Issues, and Rationale for Detailed Analysis for the Proposed Wilderness Management Plan.

Resource or Issue	No Effect	May Affect	Not Present	Rationale
Vegetation		X		**Staging area and access point work, and route rehabilitation would affect small areas of vegetation.**
Wildlife		X		**Designation of trails, staging areas, and access points may impact some individual animals. Route rehabilitation may locally, temporarily displace some individuals.**
Livestock Grazing/Range		X		**Visitor use may disturb livestock movement.**
Fire Management		X		**Wildland fire may be managed differently within wilderness than outside. MIST suppression tactics could affect fire management.**
Recreation		X		**Potential for additional regulations may affect recreational use of these areas.**

Assumptions for Environmental Consequences Analysis

The impact analysis is based on the following reasonable assumptions for the foreseeable future:

- Noxious weeds and invasive plant species could become more established in these wilderness areas.
- Wild turkey populations may inhabit these wilderness areas.
- Wild horse populations will increase beyond AML in the times between gathers, and impacts to resources resulting from horse use are expected to continue.
- In the event of a fire, active emergency stabilization and rehabilitation treatments would most likely be necessary to preserve ecosystem function and integrity.
- The potential for damage to historic and archaeological resources in these wilderness areas will increase.
- Recreational visitor use will slowly increase and types of popular use will become more diversified over the life of the Plan. More user-created primitive campsites may develop in and around the boundaries of these areas to accommodate higher levels of use. User-created trails may also develop in these wilderness areas.
- Increased visitation would result in increased impacts to resources.
- Opportunities for solitude will most likely continue to be readily available in these wilderness areas over the life of the Plan.
- Vehicle access to the three wilderness areas would remain unimproved from the existing condition.
- The BLM will continue to manage for numerous and dispersed access points and staging areas for these wilderness areas. The BLM will also continue to attempt to deter motorized trespass into these areas.
- Educating the public about wilderness is an important component of protecting wilderness resources and preserving wilderness character.

- These areas will be attractive for some research projects because of their unique resources and wilderness character.
- There will be a need for emergency, programmatic, or administrative use of mechanized equipment in one or more of the three wilderness areas during the life of this plan.
- Livestock grazing will continue in these wilderness areas subject to the terms and conditions of the relevant grazing permits, which may include limited motorized access for management of livestock and in cases of emergency. Active range developments in these wilderness areas will remain and be maintained based on grazing permit conditions.
- Small-scale surface disturbances, such as former motorized routes in wilderness areas, will be rehabilitated unless those disturbances are associated with periodic motorized administrative access allowed by the terms of grazing permits. When human structures or artifacts do not have a historic value or a permitted use, they will be removed.
- Hunting guide services and outfitters will continue to be permitted to operate in these wilderness areas. Other commercial uses that may be permitted include academically-oriented organizations whose primary purpose is wilderness or environmental education and organizations whose service is primarily for the support of people with disabilities.

Noxious and Non-Native Invasive Weeds

Affected Environment

Cheatgrass (*Bromus tectorum*) is an invasive, annual grass present in small areas at various densities throughout the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas. Cheatgrass is broadly adapted to grow on all aspects and diverse types of topography. It thrives where there is weak competition from native perennial and annual plants. The Fortification Range Wilderness is infested widely with cheatgrass, while the Parsnip Peak and White Rock Range Wilderness Areas have fairly small and dispersed patches (Peterson, 2006).

Dalmatian toadflax (*Linaria dalmatica*) is classified as a Category "A" weed on the Nevada Noxious Weed List and is targeted for eradication (Nevada Department of Agriculture, 2005). This perennial weed occupies disturbed sites, and readily spreads on recently burned land. It has been documented in and near the Parsnip Peak Wilderness, and a small infestation of Dalmatian toadflax covers approximately 3,100ft^2 at 2-25 percent cover near the southeastern boundary in T. 2N, R. 69E, Sec. 5.

Bull thistle (*Cirsium vulgare*) is a biennial invasive weed commonly found on disturbed sites. It has been documented in the White Rock Range and Parsnip Peak Wilderness Areas.

A risk assessment for noxious weeds was conducted for the three wilderness areas (Appendix One, Page 150). For this project, the risk factor is moderate. A risk rating of

moderate requires the development of preventative management measures for the proposed project to reduce the risk of introduction or spread of noxious weeds into the area.

Consequences of Elements Common to the Proposed Action and Alternative 1

The ability to detect noxious and invasive weeds would be enhanced over Alternative 2 (No Action) through a greater emphasis on monitoring. Weed treatment procedures would be clearly defined and compatible with limiting or eliminating noxious and invasive weeds. The risk of high-use concentrated weed infestation locations differs between the Proposed Action and Alternative 1. In Alternative 1, concentrated weed infestations could occur at designated camping areas, while in the Proposed Action, concentrated weed infestations could occur along the designated Trail. High-use staging areas in both Site-Specific Proposed Actions could be infested by weeds.

The continued presence and anticipated increase of recreational activities, including camping, hiking, and horse packing, may increase the spread of noxious and invasive weeds resulting from the trampling of native species and the possibility of transferring noxious and invasive seeds into wilderness. Pack stock animals used for recreational horseback riding would be required to only be fed packed-in, certified weed-free feed, decreasing the probability of contributing to weed infestation and decreasing the impact of horse browsing on vegetation.

Rehabilitation of small-scale disturbances would include methods such as decompaction, scarifying and pitting soil that may facilitate the growth of noxious and invasive weeds including cheatgrass.

Authorized motorized access could occur through emergency stabilization and rehabilitation, wildlife management, livestock permittee administrative access, or fire-management; such access may introduce or cause disturbances that encourage noxious and invasive weed establishment within wilderness.

Consequences of the Proposed Action

Invasive annual grass treatment procedures would be accessible in the Proposed Action. This may enhance the ability of the BLM to control, contain, or eliminate certain invasive grasses within these areas. Treatment of large noxious and invasive weed and invasive grass species, and the use of Picloram in the Site-Specific Proposed Action to control Dalmatian toadflax may disturb or eliminate adjacent and nearby vegetative communities.

Future proposed vegetation restoration and fuels management projects may cause minor, local disturbances that could increase the extent of local noxious and invasive weed infestations.

Consequences of Alternative 1

The following consequences are specific to Alternative 1. Invasive annual grass treatment procedures would not be readily available under this alternative. This may impede the ability of the BLM to control, contain, or eliminate certain invasive grasses within these areas compared to the Proposed Action. The site-specific action to treat Dalmatian toadflax through hand removal may not be effective to control this weed.

Because only routes and trails visible from the wilderness boundaries would be rehabilitated, the total disturbed area for Alternative 1 would be less than in the Proposed Action. This could decrease the overall risk of noxious and invasive weed establishment for this alternative.

Consequences of Alternative 2: No Action

Weed introduction along existing, undesignated trails is likely to occur. Weed treatment would occur on a case-by-case basis according to the District Noxious Weed Plan. Neither weed treatment procedures nor weed monitoring in the wilderness setting are clearly defined in Alternative 1 and would require further NEPA analysis.

Invasive annual grass treatment procedures would not be accessible in this alternative. This may impede the ability of the BLM to control, contain, or eliminate certain invasive grasses within these areas.

Vegetation

Affected Environment

The Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas are located at high elevations within the Great Basin ecoregion. Great Basin pinyon-juniper woodlands prevail throughout the areas, with mountain ascents and peaks marked with montane seral aspen, mixed conifer forests and montane sagebrush communities. Descending from range to valley, foothill mountain mahogany communities transform to Wyoming big sagebrush shrubland.

The warm, dry pinyon-juniper woodland communities are dominated by singleleaf pinyon and Utah junipers, with Ponderosa pine and White fir present at the upper margins. Shrubs in this community include sagebrush, Gambel oak, alderleaf, curllfeaf, mountain mahogany, stansbury cliffrose, green leaf manzanita, and antelope bitterbrush.

Sagebrush communities are dispersed throughout the three wilderness areas. On higher elevation, deep-soil slopes consist of sagebrush communities composed of mountain sagebrush and Wyoming big sagebrush with snowberry, serviceberry, and abundant perennial grasses. In the lower elevations, well-drained alluvial fans and valley floors consist of sagebrush shrubland communities composed of Basin big sagebrush with greasewood, saltbrush, and a few perennial grasses.

Moist montane slopes and plateaus consist of seral aspen stands co-dominated by quaking aspen, Douglas fir, white fir, pines, and spruces with an understory of serviceberry and chokecherry. The rocky outcrops of mountain foothills are marked by curlleaf mountain mahogany, associated antelope bitterbrush, green leaf manzanita, and currants. On the dry rocky ridges and slopes of higher west-facing slopes, limber and bristlecone pines are found.

Current challenges: Altered fire regimes have facilitated the spread of invasive grasses such as cheatgrass, leading to less diverse, fire-prone sagebrush and sagebrush shrubland communities. Fire suppression has advanced the expansion of pinyon-juniper trees beyond historic ranges, which has decreased plant diversity and altered indigenous sagebrush communities, as well as seral aspen and ponderosa pine stands. These alterations are exacerbated by bark beetle infestations of conifer stands, which cause stand mortality and alter fuel load conditions.

Several unique vegetation communities have been affected by these alterations, and may benefit from efforts to restore the original vegetative composition and ecological processes.

Consequences of Elements Common to the Proposed Action and Alternative 1

Construction of vehicle turn-arounds near wilderness boundaries to prevent impacts to wilderness characteristics would result in the disturbance of less than 0.5 acres per turn-around. In addition, vehicle barriers would be constructed outside of wilderness to prevent vehicles from unauthorized travel inside the wilderness, thus limiting impacts to vegetation.

Motorized access could be authorized through future emergency stabilization and rehabilitation, wildlife management, grazing permittee administrative access, or fire management actions; vegetation may be affected on and adjacent to authorized access routes stemming from any of these actions.

For protection from wildland fire, vegetation would be cut back or removed from sensitive archaeological and historic resources, such as prehistoric rock art, on an annual basis preceding fire season. This action could locally disturb or destroy small areas of vegetation.

Approved research on indigenous plant communities, and monitoring as actions relating to weeds, reclamation, rehabilitation, vegetative reclamation, and fuels management would improve long-term tracking of vegetative condition within wilderness. The prohibition of geocaching in the Proposed Action would prevent disturbance to vegetation that could occur through object burial and the development of social trails relating to geocaching.

Consequences of the Proposed Action

The Proposed Action provides specific guidance to apply vegetation restoration and fuels management projects, which could improve wilderness characteristics in the long term by re-establishing indigenous Great Basin vegetation communities and in turn restoring proper ecosystem function. It allows for the consideration of "assisted succession" in seeding projects such as those potentially proposed for Emergency Stabilization and Rehabilitation, which has been shown to increases the success rates of native species establishment and decreases the probability of cheatgrass invasion (Waldron et al. 2005; Cox and Anderson 2004; Wilson 1989; Redente and DePuit 1988).

The Proposed Action would rehabilitate 27.2 miles of former vehicle routes and trails. This rehabilitation would allow for re-vegetation within and along these former routes and trails. The proposed designation of Cottonwood Canyon Trail could impact vegetation along the trail but would decrease overall unmonitored vegetation damage that may occur with dispersed hiking under Alternative 1 and Alternative 2 (No Action).

The prohibition of traditional geocaches and letterboxes would prevent the development of social trails and concentrated vegetation impacts in the vicinity of the geocache or letterbox.

Consequences of the Alternative 1

Alternative 1 does not provide for specific guidance to apply vegetation restoration and fuels management projects, which could prevent the successful re-establishment of indigenous Great Basin vegetation communities and in turn restoration of the natural fire regime. It does not provide an opportunity for the consideration of "assisted succession" in seeding projects such as those proposed for the Emergency Stabilization and Rehabilitation section (See Page 80).

Under this alternative only the portions of the 30.5 miles of former vehicle routes and trails that are visible from outside of the wilderness boundaries would be rehabilitated. This would establish less vegetation within and along these former routes and trails than the Proposed Action, but overall impacts from rehabilitation disturbance would be less.

Geocaches and letterboxes are authorized under this alternative and would concentrate visitors to a single point, which can result in the development of social trails and greater impacts to vegetation in the vicinity of the geocache or letterbox.

Consequences of Alternative 2: No Action

Under Alternative 2 (No Action), rehabilitation of small-scale surface disturbances would be impeded, and less native vegetation would re-establish in those areas. Continued recreational use of the wilderness areas would result in continuing impacts to vegetation on foot-worn paths and at campsites. The lack of improvements and barriers to restrict unauthorized vehicle access would result in continuing impacts to vegetation. Without

management guidance for rehabilitating disturbance at defined access points, greater impacts to vegetation would result than with the Proposed Action or Alternative 1.

Livestock Grazing

EA Table 4. Grazing Allotment Use.

Allotment	Use Area	Livestock #	Grazing Period	AUMs
Cottonwood	-	250 Cattle 250 Cattle	03/01 to 06/15 11/01 to 02/28	879 986
Geyser Ranch	-	1,025 Cattle	03/01 to 02/28	12,308
South Spring Valley	-	800 Sheep 800 Sheep 386 Cattle 280 Cattle	05/01 to 06/15 09/01 to 09/30 03/01 to 05/31 06/01 to 06/15	242 158 1,168 138
Wilson Creek	Atlanta	120 Cattle 1,233 Sheep	04/01 to 06/30 11/01 to 01/31	890 746
	South Lake Valley/ Pioche Bench	196 Cattle 1,490 Cattle 1,397 Sheep	04/16 to 10/31 11/01 to 11/30 10/01 to 01/31	1,282 1,470 1,130
	Brown Springs	715 Cattle	06/01 to 06/30	784
	Summer	1,113 Cattle	06/01 to 9/30	4,465
	Miller	206 Cattle 206 Cattle	04/16 to 6/30 10/01 to 10/31	717

Affected Environment

The Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas are all open to livestock grazing. Allotments and use areas in the wilderness are shown in EA Map 8 (Page 97) and listed in EA Table 4, above. Grazing in these allotments is in accordance with federal regulations identified on existing permits.

AUMs not included in this table that may be associated with the allotments include historic suspended, as well as mandatory and voluntary non-use AUMs, for conservation and protection purposes. Livestock numbers may vary based on rotational grazing systems and the terms and conditions of the individual term grazing permits.

Existing range developments identified through administrative records and field reconnaissance within the wilderness areas are listed below in EA Table 5 and depicted on EA Map 8 (See Page 97).

The grazing permittee is responsible for maintenance of all livestock grazing facilities in the wilderness areas by cooperative agreements. Although access by motor vehicles may occur on a case-by-case basis after contacting the BLM Ely Field Office, no scheduled

access by motor vehicles for facility maintenance or livestock operations has been established.

EA Table 5. Existing Range Developments.

Wilderness Area	Allotment	Use Area	Range Development	RIP #
Fortification Range	Geyser Ranch	-	Gouge Eye Drift Fence	550328
	Geyser Ranch	-	Lake Valley Fence	550660
	Cottonwood / Wilson Creek	Miller	Moriah Wilson Creek Boundary Fence	554418
	Cottonwood	-	Kirkeby Pipeline	550400
	Cottonwood	-	Pipe Spring	007503
	Cottonwood	-	Basin Spring Pipe	007504
	Cottonwood	-	Cow Heaven Spring	007505
	Geyser Ranch	-	Charlie Lee seep improvement	007506
	Cottonwood	-	Travis Seeding Fence	550969
Parsnip Peak	Wilson Creek	Summer	Bowling Fence	554226
		Summer	Parsnip Pipeline	550661
		Summer	Meadow Valley Wash Fence	550125
		South Lake Valley	Pierson Summit Holding Fence	551034
		South Lake Valley	Coal Burner Pipeline	007507
White Rock Range	Wilson Creek	Summer	Unnamed Spring Riparian Fence	554747

Consequences of Elements Common to the Proposed Action and the Alternative 1

Motorized access to grazing facilities would be impacted by the implementation of the BLM regulations that are required in designated wilderness areas.

Approved administrative access routes would be maintained at pre-wilderness designation status in the Proposed Action and Alternative 1. This would facilitate the continued, legal access of permittees to their livestock operations, which is not clearly defined in Alternative 2 (No Action).

Consequences of the Proposed Action

While the implementation of the BLM regulations would impact livestock grazing operations, the use of programmatically-agreed maintenance agreements could decrease the burden on the permittee to acquire case-by-case District Manager approval such as proposed in the Alternative 1 and Alternative 2 (No Action).

The designation of the Cottonwood Canyon Trail in the Fortification Range Wilderness may result in greater disturbance to movement of livestock than the other alternatives by attracting additional recreational visitors to these locations.

Consequences of the Alternative 1

Case-by-case requests could be a greater burden on the permittee compared to the Proposed Action.

Consequences of Alternative 2: No Action

There is no clearly stated statement regarding access to livestock operations, which could be a burden to permittees.

Wild Horses and Burros

Affected Environment

Numerous springs in these wilderness areas are heavily impacted from wild horses. All three areas fall within the Wilson Creek HMA. Wild horse gathers are scheduled at intervals of five years in order to maintain horse populations at AML. Capture techniques used for horse gathers generally consist of helicopter-driven trapping and/or roping from horseback in addition to normal traps. Capture sites are located in previously disturbed areas; sage-grouse leks, riparian areas, cultural resource sites, and wilderness areas are avoided.

During gathers, helicopters are likely to fly over wilderness and herd horses across them. Helicopters would not be permitted to land in wilderness except in cases of emergency. BLM and contract personnel participating in gathers may also drive along access and cherry-stemmed roads to accomplish their objectives.

Consequences of Elements Common to the Proposed Action and Alternatives

Wild horse management activities would be minimally impacted by restrictions on access and activities in these wilderness areas. Helicopters could be flown over wilderness and on-the-ground gather activities could be conducted on horseback.

Consequences of the Proposed Action

Wild horses may be impacted by projects meant to restore springs and riparian areas that have been damaged by wild horse use. They would not be able to obtain water at spring sources in the way they traditionally had, but they would still have access to water in close proximity to their traditional watering location.

Horses would be impacted by visitor use in Cottonwood Canyon in the Fortification Range because the Cottonwood Canyon Trail would be designated on an existing wild horse or livestock path. Local displacement or behavior modification may occur because of visitor use.

Archaeological Resources and Historic Properties

Affected Environment

Archaeological site types that are known to occur within the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas include prehistoric rock alignments, campsites, rock rings, rock shelters, rock art, lithic scatters and isolated artifacts, as well as historic structures associated with ranching and mining.

Consequences of Elements Common to the Proposed Action and Alternatives

Inactive range developments in these wilderness areas would be inventoried to determine whether they are historic. Those that are historic would remain in place and would be protected in the same manner as other archaeological and historic resources in these wilderness areas.

Consequences of Elements Common to the Proposed Action and Alternative 1

Archaeological and historic resources would be protected from ground-disturbing activities by the requirement that the BLM Archaeologist would be involved in any such activities and projects could be altered or artifacts could be collected.

The removal of some vegetation from areas surrounding archaeological and historic resources for fire pre-suppression may enhance and protect these resources.

As public information on these areas increases, potential impacts to archaeological sites within these wilderness areas may include direct and indirect damage from increased foot traffic, removal of artifacts, vandalism, and illegal excavations. These impacts would be prevented to the greatest degree possible by adaptive management strategies designed to protect cultural resources when they become publicly known or begin to suffer some damage.

General interpretive information on wilderness resources, including archaeological resources, would help reduce impacts to archaeological sites. Continuing volunteer site stewardship efforts and increased patrol by law enforcement officers and other BLM staff would help reduce impacts to cultural sites. Regular monitoring of visitor use would trigger mitigation efforts if impacts to archaeological resources are detected.

Mine adits and shafts in these wilderness areas could be determined historic, and adit or shaft closure would impact their historic character but would contribute to wilderness character overall and contribute to visitor safety.

Consequences of the No Action

Alternative 2 (No Action) would do nothing to direct visitation or otherwise avoid potential impacts to archaeological or historic resources.

Recreation

Affected Environment

These areas provide outstanding opportunities for primitive and unconfined recreational use because of their size, topography, scenery, diverse wildlife, diverse vegetation, and opportunities for solitude. Visitor use may occur year round, though snow and colder temperatures in the winter may limit certain activities. Although visitor use surveys have not been performed to document specific numbers, overall, visitor use is assumed low with the exception of pre-hunting season scouting, mule deer and Rocky Mountain elk hunting seasons, and shed antler collection seasons.

No permits are required to visit, and there are no group size limits. The only commercial permits that have been issued are hunting outfitter and guide permits, which include the wilderness areas within a larger permitted region.

Types of recreational use known to occur include, but are not limited to, hunting, trapping, heritage tourism, nature study, other types of sightseeing and hiking. Car camping is known to occur along the periphery of all three areas, particularly at vehicle access points that were used prior to wilderness designation. These campsites are used frequently and heavily during hunting season. The greatest number of primitive campsites occurs around the White Rock Range Wilderness. Backcountry camping, mostly during hunting seasons, is also known to occur.

Approximately one mile of trail created by wild horses, livestock and/or game exist in Cottonwood Canyon of the Fortification Range Wilderness. There are no known geocaches, letterboxes, or summit registers.

Limited information about these wilderness areas is available to the public; boundary signs have been placed at prominent locations and access points, information is available on the internet, and a few published maps are available. An education and interpretation

plan is being developed for all wilderness areas in Lincoln County, but does not currently, specifically address these three.

The OHV trail accessing Scotty's Cabin is the only access route to the high point of White Rock Range Wilderness and the only feasible public access to the eastern side of the wilderness area. It is used heavily during Nevada's hunting season and moderately during the rest of the year. The existing access route is located on BLM land administered by the Cedar City, Utah Field Office. Nearest the staging area, this 0.75-mile route was initially created by a bulldozer to be used as a fire line for the Coyote Fire in 2000 and has since been used as an OHV trail to avoid private property and access an existing historical jeep trail to Scotty's Cabin.

Consequences of Elements Common to the Proposed Action and Alternatives

Hunting has been the most popular recreational use and would continue throughout the life of this Plan. Hunters could be minimally inconvenienced by the prohibition of motorized use in wilderness, but local game populations would be less disturbed by human activity, which could provide better hunting opportunities.

Consequences of Elements Common to the Proposed Action and Alternative 1

Visitors' enjoyment of the natural and cultural resources would be enhanced through resource information interpreted and displayed on kiosks, maps, and other forms of media. Because the BLM would work with independent producers and publishers of media about these wilderness areas to the fullest extent possible, visitors taking advantage of these resources would have the most accurate information available.

Visitors could easily access these wilderness areas and would be provided amenities such as space for parking at access points and staging areas. Camping opportunities would be readily available. Visitors wishing to participate in horseback recreational activities would be minimally inconvenienced by the requirement of packing in certified weed-free feed. Guide services and outfitters could improve the wilderness experience for visitors wishing to be escorted for the purposes of hunting, education, or access for people with disabilities.

Ground-disturbing projects, such as Emergency Stabilization and Rehabilitation treatments, would minimally impact the wilderness recreation experience of most visitors because they would be conducted in such a manner as to avoid times of high visitor use, such as weekends, holidays and hunting season. Visitor safety would be improved by the closure of mine adits or shafts discovered in these three wilderness areas.

Recreational access to the White Rock Range would be improved by the Scotty's Cabin Staging Area and the access route from the staging area to Scotty's Cabin on the Nevada boundary of the White Rock Range Wilderness. The access route has been well-used by a

handful of people who know the area, but the public has not used this route largely because it has not been marked as public access. The only other access to the eastern side of the White Rock Range Wilderness has been through private property. Signing this access route would improve the situation for both the recreating public and nearby private landowners.

Consequences of the Proposed Action

Approximately one mile of trail would be designated in Cottonwood Canyon in the Fortification Range Wilderness. The majority of the Fortification Range Wilderness and all of the Parsnip Peak and White Rock Range Wilderness Areas would not be accessed by designated trails. Cross-country travel on foot and by horse would not be affected, and the experience of visitors seeking a more primitive and unconfined form of recreation would be enhanced. Because no group size limitations would be placed on visitors in these wilderness areas, large groups could be encountered, but opportunities for solitude would remain extensive. A monitoring system would be established to prevent or respond to degradation of trails, campsites, solitude, additional foot-worn paths, and recreational impacts to other resources.

Traditional geocaching and letterboxing would not be allowed. Geocaches and letterboxes would be removed when encountered. Visitors wishing to participate in geocaching would be directed to locations outside of the wilderness areas.

Permanent structures are not allowed in wilderness areas, therefore hunters would be required to remove hunting blinds at the end of their season of use, which could be a minimal inconvenience, but may improve the wilderness hunting experience for other hunters and the wilderness experience for other visitors.

Because this Plan would not set limits on the number of guide services operating in these wilderness areas and demand for services could increase over the life of the Plan, an increase in commercially-guided activities, such as heritage tourism, may result in an increase in informal foot-worn hiking paths, campfire impacts, and increased visitor encounters.

Consequences of Alternative 1

No trails would be designated. Cross-country travel on foot and by horse would be the primary way to access into the heart of all three wilderness areas. The experience of visitors seeking a more primitive and unconfined form of recreation would be enhanced. Group size limitations could protect visitors' experiences of solitude if, during the life of the Plan, the wilderness areas become so popular that opportunities for solitude are threatened, though it is unlikely this would happen. A monitoring system would be established to prevent or respond to degradation of campsites, solitude, additional foot-worn paths, and recreational impacts to other resources.

Geocaching and letterboxing would be allowed by letter of agreement. Unauthorized geocaches and letterboxes would be removed when encountered. Visitors wishing to participate in geocaching would have limited opportunities to do so, and those wishing to place geocaches or letterboxes could be inconvenienced by the process of analysis and agreement on placement. Authorized geocaches in these wilderness areas could result in increased foot-worn hiking paths and increased visitor encounters.

Visitors would also be made aware of all restrictions relating to wilderness use, which could limit their sense of an unconfined, primitive recreational experience, but would help them to understand wilderness regulations and the punishments associated with breaking them.

Hunters would be required to remove hunting blinds after each use, which could be a minimal inconvenience, but could improve the wilderness hunting experience for other hunters and the wilderness experience for other visitors.

Because hunting guide services would be limited to the number of services that operated in these areas at the time of wilderness designation, existing guide services may not be able to support demand for services, should that demand increase over the life of the Plan.

Consequences of Alternative 2: No Action

There would be no designated trails under this alternative. 30.5 miles of existing former vehicle routes would be left open as foot-worn paths. This would not affect opportunities for cross-country hiking or horse packing within the areas.

Because commercial services in these wilderness areas would be permitted to the extent necessary for activities that are proper for realizing the recreational or other wilderness purpose of these areas, there would be fewer limitations on the number of commercial services allowed to operate than under the Proposed Action or Alternative 1. This could result in more guided opportunities for visitors, but could cause negative impacts to solitude in these areas over the life of the Plan.

Recreational use of these areas would not be subject to regulations beyond the Wilderness Act (1964), subsequent laws, and BLM policy. This could enhance the unconfined, unregulated experience over the Proposed Action, but could also result in negative impacts to the wilderness resource that could then impact visitors' wilderness experience and opportunities for solitude. Geocaching would not be allowed in any of the wilderness areas. Geocaches would be removed when encountered. Individuals wishing to geocache would be directed to locations outside the wilderness.

Wilderness

Affected Environment

The Wilderness Management Plan addresses management of the 30,656-acre Fortification Range, 43,693-acre Parsnip Peak, and 24,413-acre White Rock Range Wilderness Areas. Wilderness characteristics are described under five categories: untrammeled, naturalness and primeval character, undeveloped, outstanding opportunities for solitude or a primitive unconfined form of recreation and other features of scientific, educational, scenic, or historical value.

Volcanic Tuft in the Fortification Range Wilderness

These areas have few trammeling activities. Trammeling activities include various measures in the management of wildland fire and weeds, the presence of authorized allotment fences, pipelines, and water troughs, the presence of former vehicle routes and the rehabilitation work that has been done on them.

The naturalness and primeval character of the three areas is mostly preserved. Some changes to the native vegetation composition have occurred, including the introduction of the invasive annual cheatgrass. Non-native wild turkeys were released by NDOW outside of the White Rock Range for hunting and can now be found in the wilderness, and wild horses are present in all three areas.

Few developments occur and include range developments, such as fence lines, pipelines and troughs, former vehicle routes and trails, including 9.0 miles of former vehicle routes and approximately one mile of trail created by wild horses, livestock and/or game in the Fortification Range Wilderness, 10.7 miles of former vehicle routes in the Parsnip Peak Wilderness and 10.8 miles of former vehicle routes in the White Rock Range Wilderness. Outstanding opportunities for solitude and primitive, unconfined recreation are present in all three wilderness areas. Remote ridges, canyons, and drainages in these three areas provide excellent opportunities for solitude. The rugged terrain, scattered rocky outcrops, and prehistoric sites in these areas provide for recreation opportunities such as hiking, camping, hunting, heritage tourism, nature study, and horseback riding. Only the 14-day stay limit for camping in all three areas confines recreational opportunities.

Consequences of Elements Common to the Proposed Action and Alternative 1

Untrammeled

Summit registers at high points in these wilderness areas would also have trammeling effects, but could increase visitor enjoyment.

Undeveloped

According to current information, nine range developments in the Fortification Range Wilderness, five in the Parsnip Peak Wilderness, and one in the White Rock Range Wilderness would remain in use for livestock grazing. The removal of inactive, non-historic range would contribute to undeveloped wilderness character. However, maintaining existing active developments would have minimal impacts. Allowing the inactive, historic range developments to remain in place would impact the undeveloped quality of wilderness, but would contribute to the historic character of the area and would comply with cultural resource preservation laws and the Wilderness Act (1964).

Outstanding Opportunities for Solitude or a Primitive and Unconfined Form of Recreation

Visitor encounters in these wilderness areas would be infrequent. However, during hunting and shed antler collection seasons, encounters could occur more frequently. Outstanding opportunities for navigating and traversing difficult terrain would not be affected.

Consequences of Elements Common to the Proposed Action and Alternative 1

Untrammeled

Trammeling activities would continue in the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas. Activities may continue for the management and suppression of wildland fire. Activities may continue in the control of invasive and non-native species. Future wildlife relocation activities and future wildlife water developments may occur under the Plan guidelines. Emergency stabilization and

rehabilitation activities following wildland fires may occur as well. While all of these activities would have trammeling impacts, they could contribute to the long-term natural qualities of the wilderness areas. Removal of vegetation surrounding archaeological sites for protection from wildland fire would be a trammeling impact, but would enhance and protect these supplemental values.

Mine adits or shafts in these wilderness areas would have trammeling impacts. If these mine adits or shafts are proposed to be closed by filling or dynamite in the future, such action would also have trammeling impacts, but wilderness character would benefit in the long term.

Naturalness and Primeval Character
The naturalness and primeval character would remain mostly intact. Noxious and invasive weeds would remain and/or spread in portions of all three areas, although most noxious weeds would be removed to restore and preserve the natural character.

Undeveloped
Removal of personal property not associated with legitimate campsites, hunting blinds after the season of use or artifacts less than 50 years old would enhance the undeveloped character.

Consequences of the Proposed Action

Untrammeled
The programmatically-approved use of motorized equipment for access to active range developments and rehabilitation activities on small site disturbances would have trammeling effects in the short term.

Naturalness and Primeval Character
Actions may be taken in fire and fuels management as well as restoration and reclamation projects to prevent further conversion of native to non-native vegetation communities. Consequently the natural and primeval character would be enhanced.

Future proposed reclamation treatments involving seeding with non-native plant species would have short-term negative impacts on the natural quality of wilderness. However, studies suggest that this method would contribute to the long-term naturalness by facilitating successful long term establishment of native plant species (See Appendix 2, Page 153).

Undeveloped
Administrative access routes, as depicted on EA Maps 2─3 would remain and would impact undeveloped wilderness character (See Pages 67─69).

8.4 miles of former vehicle routes in the Fortification Range Wilderness, 8.0 miles of former vehicle routes in the Parsnip Peak Wilderness and 10.8 miles of former vehicle

routes in the White Rock Range Wilderness would be reclaimed, which would improve the undeveloped character of wilderness in the long term.

In the Fortification Range Wilderness, approximately one mile of trail would be designated and maintained which would only have localized impacts.

Hunting blinds in place during the season of use would have temporary impacts. Temporary structures associated with rehabilitation and reclamation projects would have short term impacts, but the projects would contribute to the long term naturalness of the areas by promoting the growth of native plants. Impacts of such structures would be analyzed specifically in relation to individual project proposals.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Form of Recreation

No additional regulations would be put in place to confine or restrict recreational activities. Management actions that confine use may be implemented if visitor use and encounters increase.

Consequences of Alternative 1

Untrammeled

Geocaches and letterboxes located in wilderness invite visitors to a single point, which can result in the development of social trails and vegetation trampling around the geocache or letterbox. This would have a negative impact on the untrammeled quality of wilderness character.

The approved use of motorized equipment for approved access to active range developments and rehabilitation activities on small site disturbances would have trammeling effects in the short term.

Naturalness and Primeval Character

The use of non-natives in reseeding projects would temporarily impact the natural and primeval character of wilderness.

Undeveloped

Portions of the 30.5 miles of former vehicle routes that are visible from outside of the wilderness boundaries would be reclaimed, which would enhance the undeveloped character of wilderness in a limited area. The remaining route disturbance would detract from the undeveloped character.

New trails may be developed and designated under Alternative 1 to meet future demands. The presence of these trails and the associated directional signs would have impacts to undeveloped character.

Geocaches and letterboxes would be allowed after completing site-specific analysis for each geocache or letterbox. The presence of physical geocaches or letterboxes would

impact the undeveloped character. The presence of virtual geocaches would have impacts by increasing the potential for foot-worn hiking paths.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Form of Recreation
Additional regulations that would confine or restrict recreational activities are group size limits. Other management actions that confine use may be implemented if visitor use and encounters increase.

Consequences of Alternative 2: No Action

Untrammeled
No new actions would be proposed that would trammel these wilderness areas. Current management activities that may continue include the management and suppression of wildland fire. New trammeling activities would be considered on a case-by-case basis.

Naturalness and Primeval Character
The naturalness and primeval character would remain mostly intact. Non-native plants such as cheatgrass would remain in and/or spread in portions of all three wilderness areas. Limited actions may be taken in fire management to prevent further conversion of native to non-native vegetation communities compared to the Proposed Action and Alternative 1.

Undeveloped
Personal property, unauthorized structures, or installations would be removed as encountered as long as they are not historically significant. Removal of these items would maintain or improve the existing undeveloped character.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Form of Recreation
No additional regulations would be put in place to confine or restrict recreational activities. Management actions that confine use may be implemented if visitor use and encounters increase.

Under this alternative, there would less public information available regarding these areas. This may result in greater opportunities for solitude than the other action alternatives.

Riparian Areas and Wetlands

Affected Environment

Many intermittent streams carry precipitation in the form of rain and snowmelt and at least 98 perennial springs discharge water from the local and regional aquifers of the area. Many of the perennial springs in these wilderness areas have been developed for livestock use.

Riparian Areas and Wetlands

Several of the springs and intermittent streams support adjacent riparian vegetation, which includes black cottonwood, quaking aspen, willows, Woods' rose, sedges, rushes, and rabbit brush. In the Fortification Range Wilderness, the proposed Cottonwood Canyon Trail is located adjacent to Cottonwood Spring, an unnamed spring, and their associated streams and riparian areas. Lake Spring supplies water to Lake Spring Lake, which perennially covers approximately 0.9 acres in the northeast region of the White Rock Range Wilderness. This perennial lake in turn supports riparian vegetation.

Consequences of Elements Common to the Proposed Action and Alternative 1

Noxious and invasive weed management and monitoring could remove or control weeds such as tamarisk or Russian olive near riparian areas or wetlands, which could restore proper ecosystem function.

A trail management approach would be used for management of cherry stems, and water bars could be installed to manage water runoff. This approach would help to protect riparian areas and wetlands.

Informal campsites would be removed when they are closer than 300 feet to any spring or water source, which could protect riparian areas and wetland health.

Consequences of the Proposed Action

The Proposed Action provides specific guidance to apply vegetation restoration and fuels management projects, which could improve wilderness characteristics in the long term by restoring indigenous Great Basin ecosystem riparian vegetation dynamics.

The potential future exclosure of wild horses from heavily used springs could improve the riparian conditions near the spring, which would enhance wilderness character.

The proposed Cottonwood Canyon Trail is adjacent to Cottonwood Spring and associated riparian vegetation. However, this Trail and all future designated trails and informal foot-worn paths could be rerouted when the risk for excessive water-caused soil erosion, and associated damage to riparian areas or wetlands, is high. Interpretive signs would be placed near sensitive resources if it is determined that educating visitors would be the best measure for protection.

Consequences of Alternative 1

This Alternative does not provide specific guidance to apply vegetation restoration projects that could improve riparian areas. Exclosure of wild horses around heavily used springs and riparian areas would not occur; therefore degradation and impairment of

horse-damaged riparian areas would persist. Interpretive signs regarding sensitive resources would enable the public to help protect this sensitive resource.

Consequences of Alternative 2: No Action

Exclosures for wild horses around heavily used springs and riparian areas would not occur; consequently the degradation and impairment of these riparian areas would persist.

The lack of specific management guidance for informal foot-worn paths could contribute to greater risk for excessive water-caused soil erosion and associated damage to riparian areas or wetlands. The lack of management guidance for adjacent cherry stem routes would not help to protect riparian areas and wetlands.

Wildlife

Affected Environment

Wildlife in these wilderness areas is abundant and diverse. No wildlife water developments are present in the three wilderness areas. Key habitats include lower montane woodlands, intermountain conifer forests and woodlands, aspen woodlands with riparian ecotones, and sagebrush communities, and many wildlife species found in these wilderness areas are dependent or common in these habitat types (NDOW 2006).

Game Animals

Rocky Mountain elk and mule deer occur throughout the three areas. Pronghorn antelope occupy the low sage flats in the periphery of the Fortification Range Wilderness.

Game birds include Rio Grande wild turkeys and greater sage-grouse. Rio Grande wild turkeys are a non-native species that have been transplanted near the White Rock Range Wilderness and occupy the pinyon-juniper and mixed sagebrush shrubland communities of the wilderness area. Greater sage-grouse have nesting areas within sagebrush communities and brood-rearing habitat in riparian areas.

Migratory Birds

Migratory birds with potential occupancy can be identified through key habitats in the areas. Migratory birds associated with lower montane woodlands and intermountain conifer forests and woodlands include the gray flycatcher (*Empidonax wrightii*), pinyon jay (*Gymnorhinus cyanocephalus*), gray vireo (*Vireo vicinior*), juniper titmouse (*Baeolophus ridgwayi*) and black-throated gray warbler (*Dendroica nigrescens*) (NDOW 2006).

Migratory birds associated with aspen woodlands include MacGillivray's warbler (*Oporornis tolmiei*), willow flycatcher (*Empidonax traillii*), orange-crowned warbler (*Vermivora celata*) and yellow-breasted chat (*Icteria virens*). Migratory birds associated with sagebrush communities include the sage thrasher (*Oreoscoptes montanus*), sage

sparrow (*Amphispiza belli*), Brewer's sparrow (*Spizella breweri*) and Wilson's phalarope (*Phalaropus tricolor)* (NDOW 2006).

Special Status Species

No known federally threatened or endangered species areas are known to occur in these areas. Based on existing habitat and previously collected data, sensitive species, including the ferruginous hawk, greater sage-grouse, and prairie falcon, do occur. Bald Eagles, protected by the Bald and Golden Eagle Protection Act and state laws, may forage in the region through the winter.

Although no individuals have been documented, the rough, rocky, and steep terrain in the higher elevations of the Fortification Range Wilderness is considered potential range for Rocky Mountain bighorn sheep.

No formal surveys for special status plants have been completed in wilderness but some species may exist.

Consequences of Elements Common to the Proposed Action and Alternative 1

The rehabilitation of small-scale surface disturbances such as former vehicle routes and abandoned campsites could enhance wildlife habitat in proximity to the rehabilitated sites. Ground-disturbing rehabilitation methods may have localized, short term impacts.

Informal foot-worn paths may be rehabilitated or modified if they are determined to have a negative impact on wildlife, including special status species.

The removal of campsites within 300 feet of springs would decrease disturbance to special status species such as greater sage-grouse, ferruginous hawk, and prairie falcon near water sources.

Consequences of the Proposed Action

The designation of the approximately one mile long Cottonwood Canyon Trail in the Fortification Range Wilderness may result in local impacts to wildlife from increased visitor use along this corridor.

Other ground-disturbing actions include development of the Cottonwood Canyon and Scotty's Cabin Staging Areas, which include vehicle turn-around points. The Cottonwood Canyon and Scotty's Cabin Staging Areas could disturb up to 2 acres adjacent to the Fortification Range and White Rock Range Wilderness Areas. Disturbance would have short term effects during area development, and could have long term impacts on local movement of individual animals by attracting and focusing visitor use to those points. The numerous turn-around points adjacent to the wilderness areas could affect nearby habitat with noise, human presence, and compacted soil, which may result in local, short-

term impacts to wildlife. The removal of structures, installations and other human effects or disturbances could eliminate occupied nests, roosts, dens and other wildlife habitat.

Specific guidance for vegetation restoration and fuels management projects could provide better habitat for game animals, including Rocky Mountain bighorn sheep, small mammals, special status species, and specialized species. If interpretive signs regarding wildlife resources were deemed necessary, they could help deter human disturbance to wildlife.

Consequences of Alternative 1

A smaller area of rehabilitation would occur compared to the Proposed Action. While this would restore less habitat, impacts to temporarily displaced wildlife would be less.

No specific guidance regarding vegetation restoration and fuels management projects may restore less overall native habitat for wildlife and special status species compared to the Proposed Action.

Interpretive signs regarding wildlife resources would be more detailed than in the Proposed Action and may be more effective in deterring human disturbance to wildlife.

Consequences of Alternative1: No Action

There would no specific guidance regarding wildlife management and education, which may lead to increased disturbance of wildlife and wildlife habitat by visitors. The lack of an education program, signage, or proactive recreation management would be less effective in helping to protect special status species when compared to the Proposed Action or Alternative 1.

Fire Management

Affected Environment

These wilderness areas include three FMUs as shown on EA Map 9 (See Page 133). In the current Ely BLM District FMP, each FMU has been identified for wildland fire use and will be managed, to the extent practical for resource benefit, to improve ecosystem function and to allow fire to function as a natural part of the ecosystem (Ely Field Office FMP, 2004).

The majority of land in the wilderness areas is considered to be of a Fire Regime Condition Class 3, which means, **"**These lands have been significantly altered from their historical range. Because fire regimes have been extensively altered, risk of losing key ecosystem components from fire is high. Before prescribed fire can be utilized to manage fuel loads or restore proper ecosystem function, these lands may require multiple mechanical or chemical restoration treatments or reseeding" (Ely Field Office FMP, 2004).

According to current information, several large wildfires have occurred in these areas in the last ten years. In Parsnip Peak Wilderness, "Buster" affected the southeast area in 2002, and "Parsnip" affected the east-central area in 2000. Smaller wildfires include the 2004 "Pierson Summit" in the southern area. In White Rock Range Wilderness, the large "Whiterock" and "Parsnip" wildfires affected the eastern area in 2002. These wildfires affected the vegetation communities and may have encouraged cheatgrass establishment in some areas. No wildfires have been documented in the Fortification Range Wilderness after 1974.

The fire season generally occurs between May and October. The primary cause is lightning strikes. Fires in these FMUs are wind-driven, and live fuel moisture plays a very small role in variability of fire size. Most lightning-caused fires are associated with the summer monsoon season.

Current Challenges: Historic fire suppression in sagebrush ecosystems has resulted in the loss of native perennial grasses and forb understories (Miller and Tausch 2001; Blackburn and Tueller 1970) leaving an ecological niche open to non-native invaders such as fire-prone cheatgrass (Forbis et al., 2006), which has altered the frequency and intensity of historic fire regimes.

Consequences of Elements Common to the Proposed Action and Alternatives

MIST tactics would limit the use of motorized vehicles and equipment as well as certain suppression techniques that may impact wilderness characteristics. The use of aerial suppression techniques such as retardants would create a short-term impact to visual resources, but would reduce surface impacts from ground-disturbing suppression activities such as line construction.

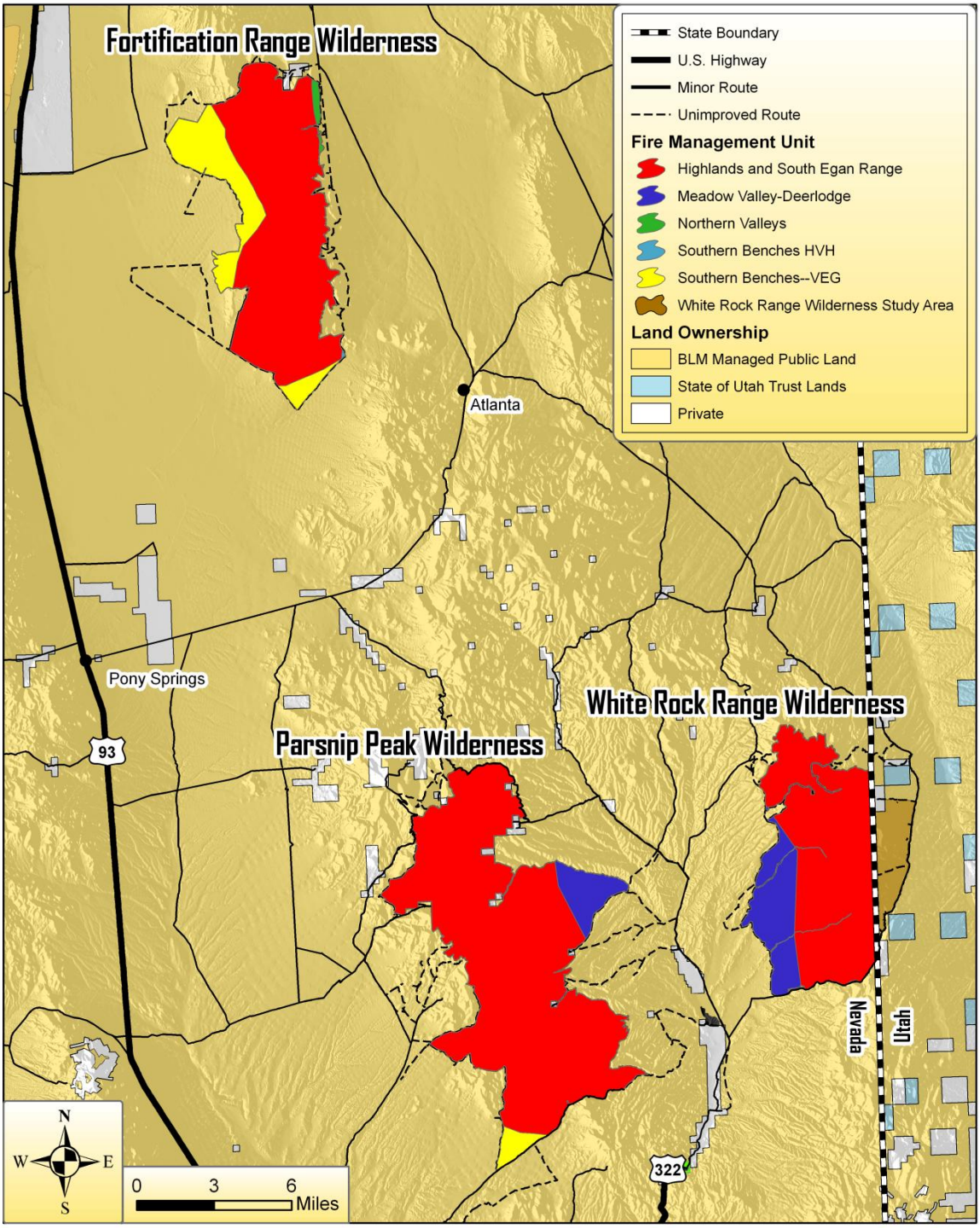
Consequences of the Proposed Action

Specific guidance for fuels management, such as prescribed burns, could facilitate the restoration of natural ecosystem functions, which would benefit wilderness characteristics. The opportunity for the BLM Emergency Stabilization and Rehabilitation Specialist to consider "assisted succession" strategies in reclamation projects could decrease the distribution and density of cheatgrass invasions, which could decrease the likelihood of catastrophic wildfires.

Consequences of Alternative 2: No Action

The lack of specific guidance for fuels management projects, such as prescribed burns, could slow down efforts to restore overall natural ecosystem function.

EA Map 9: Current Fire Management Units Within Wilderness



Chapter Four

Cumulative Impacts

Cumulative impacts result from the incremental impact of an action when added to other past, present, and future actions, regardless of what agency or other person undertakes such other actions. Cumulative impacts could result from individually minor but collectively significant actions, taking place over a period of time.

This section identifies past, present and reasonably foreseeable future actions so that their contribution to cumulative impacts can be considered. Past actions are those that have been completed to date, present actions may have been started in the past but are ongoing and are not yet completed, and future actions are those for which there is a reasonable belief they will occur and are not merely speculative.

Focus of the Cumulative Impacts Analysis

According to the 1994 BLM publication," Guidelines for Assessing and Documenting Cumulative Impacts" the cumulative impacts analysis should be limited to those issues and resource values identified during scoping that are of major importance. Issues of major importance identified during internal and external scoping focused on the qualities that give these areas their value as wilderness: naturalness, primitive and unconfined recreation, and solitude. Wilderness qualities, therefore, are the focus of the cumulative impact analysis.

Area and Timeframe of Analysis

The geographic area of analysis is the area encompassed by each of the three wilderness areas and the timeframe for analysis, which is the projected life of this Wilderness Management Plan, is 10 years.

Past Actions

These three wilderness areas were designated in November of 2004. Prior to designation, opportunities for solitude and primitive, unconfined recreation were outstanding. There were 30.5 miles of vehicle routes across all three areas, which were closed by wilderness designation. Approximately 27 miles of routes have been actively reclaimed. There are some portions of the three areas that have become infested with the annual invasive cheatgrass. Livestock grazing is an authorized use.

Present Actions

Current actions include increased educational programs regarding wilderness ethics and Leave No Trace principles, increased signing efforts, as well as BLM staff and volunteer monitoring patrols. There has been a small increase in public interest in these wilderness areas for their recreational opportunities.

Reasonably Foreseeable Future Actions

The population of southern Nevada continues to grow and expand. It is expected that opportunities for solitude in these three areas could decrease in the future as the result of increased population growth. Other anticipated results of population growth and subsequent increased use of these wilderness areas include increased impacts to vegetation, wildlife and cultural resources, as well as the possibility that more cultural resources may be discovered. It is expected that the invasive annual cheatgrass would continue to expand within these wilderness areas. It is expected that wildland fire would continue to require some trammeling management actions to prevent excessive spread of cheatgrass. Livestock grazing would also continue to be an authorized use in these wilderness areas, and maintenance of the existing range developments would be required over time. Where wild horse use is negatively impacting springs and riparian systems, it is possible that exclosures could be installed in the future, which would impact wilderness trammeling but improve wilderness naturalness in the long term.

Conclusion

The cumulative impacts of this wilderness management plan for these areas when considered in combination with past, present, and reasonably foreseeable future actions would result in the maintenance of wilderness qualities with minimal user regulations.

Chapter Five

Monitoring

Monitoring tracks the outcome of proposed activities on the four qualities of wilderness character, not just on the quality of wilderness that the activity was primarily intended to address. Monitoring all wilderness areas is a component of the Ely District Wilderness Program, so some monitoring will occur even under the No Action. This monitoring section includes monitoring that would occur specifically to the Proposed Action.

Wilderness character encompasses a combination of elements as described by four principal qualities defined in the Wilderness Act. The combination of these qualities distinguishes wilderness from all other lands. These four qualities are of equal importance to one another and are defined as:

- ***Untrammeled*** ─ wilderness is unhindered and free from modern human control or manipulation.
- ***Outstanding opportunities for solitude or a primitive and unconfined type of recreation*** ─ wilderness provides opportunities for people to experience solitude or primitive and unconfined recreation, including the values of inspiration and physical and mental challenge.
- ***Undeveloped*** ─ wilderness is substantially without permanent developments or modern human occupation.
- ***Natural*** ─ wilderness ecological systems, being affected primarily by the forces of nature, retain their primeval character and influence substantially free from the effects of modern human civilization.

Untrammeled	The following monitoring would assist the BLM in tracking and improving the untrammeled condition of the wilderness areas:

- A log of all annual management and other activities that control or manipulate flora, fauna, soils, water, or natural disturbance factors present in the wilderness would be maintained in each area's permanent wilderness file. A description, location, purpose, and expected outcome of each activity would be documented. Activities that may be tracked include:

  - Campsite expansion and dispersion.
  - Rehabilitation projects.
  - Vegetation restoration and fuels treatment projects.
  - Fire suppression activities.
  - Emergency Stabilization and Rehabilitation activities.
  - Treatments of noxious or invasive vegetation.
  - Wildlife management activities.

- Periods of livestock grazing.
- Archaeological and historic resource protection projects.

Solitude and Primitive, Unconfined Recreation	The following monitoring would assist the BLM in preserving outstanding opportunities for solitude or a primitive and unconfined type of recreation:

- A log of sights and sounds of civilization would be maintained in each area's permanent wilderness file. A description and location of the activity inside or outside wilderness would be documented.

- A log of all regulations or restrictions occurring in the wilderness areas will be maintained in each area's permanent wilderness file. A description of the regulation and its purpose will be documented.

- Visitor use encounters on designated trails would be monitored through one or more of the following methods:

  - Visitor sign-in and comment forms at trailheads and access points.
  - Public comment received by mail or by e-mail.
  - Automated visitor counters may be located at trailheads or access points.
  - Wilderness rangers or volunteer stewards would visit trailheads and access points at least once every two months to record the number of vehicles and collect written comments or other trail data.

- Wilderness rangers or volunteer stewards would hike each trail at least twice a year to record the number of encounters and trail conditions. Trail conditions would be recorded using a Global Positioning System (GPS) and photos would be taken as needed.

- The wilderness areas would be monitored at boundary roads and access points at least once every three months by wilderness staff and law enforcement rangers or volunteer stewards to detect any unauthorized uses. Additionally, over-flight and aerial surveillance monitoring will occur twice annually to assist in detecting unauthorized uses.

- Campsites would be recorded by the wilderness ranger to assure compliance with Plan standards. GPS coordinates and photos would be taken for campsites to track long-term trends.

- The White Rock Range Wilderness and popular hunting areas in the Parsnip Peak and Fortification Range Wilderness Areas would be monitored regularly for motorized trespasses, foot-worn hiking trails, and proliferation of campsites during hunting season by wilderness rangers, law enforcement rangers, or volunteer stewards.

Undeveloped and Natural Appearance	The following monitoring would assist the BLM to track and, where possible, restore the undeveloped and natural appearance of the wilderness:

- A log of all the developments, structures, and facilities present in the wilderness areas – both permanent and temporary – would be maintained in each area's permanent wilderness file. A description, location, purpose, and expected outcome of the feature would be documented.

- All former vehicle routes and other rehabilitated disturbances will be assessed for motorized use at least twice a year. Photo points would be established at the time of reclamation, and photos will be taken as part of the semi-annual monitoring. If unauthorized vehicle use or other forms of disturbance continue, modifications as described in the Plan would be made.

- All designated administrative access routes will be checked at least twice a year to assess compliance with grazing permits.

- Popular hunting areas within these wilderness areas will be monitored at the end of hunting season and structures associated with hunting, such as illegal and unauthorized blinds.

Naturalness and Primeval Character	The following monitoring would assist the BLM in preserving the naturalness and primeval character and influence of the wilderness:

- A log of all known human alterations to the ecosystem will be maintained in each area's permanent wilderness file. A description and location will be documented or referenced. Conditions that may be tracked include:

  - Noxious and invasive weeds.
  - Special status species.
  - Air quality.
  - Presence, abundance, and distribution of native species.

- A log of natural disturbances will be maintained in each area's permanent wilderness file. A description and location will be documented or referenced. Activities that may be tracked include:

  - Fire.
  - Flood.
  - Insect or disease outbreaks.

- Monitoring for noxious and invasive weeds will occur at least once a year, with an emphasis at springs, on trails, or in washes receiving regular visitor use.

- Wildlife monitoring will be accomplished primarily by NDOW, according to the agency's established protocol. The BLM wilderness rangers will also record wildlife sightings, in particular for nesting raptors, special status species, and bighorn sheep. Monitoring or research by other entities may occur according to protocol described in the Plan.

- Findings, or a reference to the findings, from inventory, monitoring, and research projects will be included in each area's wilderness file. Other documented research outside of wilderness but applicable to the understanding of wilderness ecosystems may be referenced.

- Monitoring to assess the effects of recreation on wildlife habitat use and behavior will occur if feasible monitoring methods are developed

- Monitoring will be included to account for changes to the natural fire cycle occurring from introduced annual grasses. This additional monitoring will aid fire management in determining AMR on an annual basis. For fires having greater potential to convert native vegetation to unnatural annual grass-dominated vegetation, fire management will have better information to adjust response to the most active suppression response compatible with the fire management objectives and procedures for the area.

- Monitoring archaeological resources and historic properties regularly by BLM staff and through the cultural site steward program will be done frequently at known sites and for areas of high visitor use.

Monitoring of Site-Specific Actions

- Additional monitoring will occur for the following site-specific actions associated with the attached Environmental Assessment in order to ensure that wilderness character is protected and that undue impacts to other resources are not occurring as a result of the proposed actions:

    - Development of the Cottonwood Canyon Trail in the Fortification Range Wilderness.
    - Development of the Cottonwood Canyon Staging Area on the Fortification Range Wilderness.
    - Development of the Scotty's Cabin Staging Area near the White Rock Range Wilderness.
    - Installation of a sign indicating public access to the White Rock Range Wilderness at the intersection near the Scotty's Cabin Staging Area.
    - Installation of informational kiosks at the Cottonwood Canyon and Scotty's Cabin Staging Areas of the Fortification Range and White Rock Range Wilderness Areas, respectively.

- Installation of an informational kiosk along the road through Camp Valley between the Parsnip Peak and White Rock Range Wilderness Areas.
- Installation of an information kiosk at Spring Valley State Park providing information on wilderness in Lincoln County, with specific focus on the Fortification Range, Parsnip Peak and White Rock Range Wilderness Areas.
- Rehabilitation of 30.5 miles of former vehicle routes, including 8.4 miles in the Fortification Range Wilderness, 8.0 miles in the Parsnip Peak Wilderness and 10.75 miles in the White Rock Range Wilderness.
- The treatment of a small infestation of Dalmatian toadflax with the herbicide Picloram near the southeastern boundary of the Parsnip Peak Wilderness.

Plan Evaluation

All field reports, photographs, and monitoring data will be maintained in the official wilderness files at the BLM Ely District Office. The Plan will be revised when the management actions prescribed no longer meet the wilderness management objectives, or when a change in the existing situation warrants revised management. The need for revision will be reviewed every five years. If the decision is made to revise the Plan, it will be accomplished with public participation. Minor revisions such as typographical or cartographical errors may be made by inserting an errata sheet.

Plan Implementation Sequence

Management of the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas will be carried out in accordance with this Plan under the direction of the Ely BLM Wilderness Staff. Other BLM staff and volunteers may be called upon for support or subject expertise. Four types of management activities may occur. These types of management activities may be completed based upon the NEPA analysis done for this plan:

- Ongoing activities carried out through the life of the Plan.
- Activities that will be implemented as special projects at the beginning of the plan. The second two types of management activities will require action-specific NEPA analysis before they can be completed.
- Management activities triggered by changes in conditions as detected through monitoring.
- Activities that may be proposed in the future for which general guidance exists in the plan, or that may not be addressed in the plan.

The following list shows the priority sequence for accomplishing management activities of this Plan. The actual implementation could be altered based on funding and staff availability outside the control of this Plan.

Ongoing Activities

- Maintenance of boundary signs.
- Trail, vehicle access point, and staging area construction and maintenance.
- Vegetation clearing around archaeological resources.
- Wilderness monitoring;
    - Visitor use monitoring.
    - Natural resource monitoring.
    - Trail condition monitoring.
    - All other wilderness character monitoring.
    - Visitor information dissemination.

Wilderness Management Plan Specific Projects

Implementation would not require additional NEPA analysis for the following projects that are covered in the EA:

- Archaeological, botanical and threatened and endangered species clearances to support Plan implementation.
- Write and publish supplemental rules for all visitor use standards established in the Plan as specified under 43 CFR 8365.1-6.
- Rehabilitation;
    - Former vehicle routes.
    - Campsites.
    - Prospecting disturbance.
    - Vehicle access parking points established.
- Staging areas developed as appropriate.
- Signing;
    - Trailhead, vehicle access point and staging area wilderness information signs, and kiosks.
    - Off-site kiosks.
    - Public access signage.
- Removal of unnecessary structures and installations.
- Maintenance, modification, or removal of livestock developments as appropriate.
- Fire Management Plan.

Changing Conditions Requiring Subsequent NEPA Analysis

- New visitor impacts.
- Fire rehabilitation.
- Trail designation;
    - Trail preparation (improvement of sections not currently within standards).
    - Trailhead development.
- New trail construction.
- Trail reconstruction or stabilization.

- New vehicle access point or staging area construction.
- Management of social conditions;
  - Visitor use regulations.
  - Group size limits.
  - New sign or kiosk installation.
- NEPA following non-conforming fire management and suppression actions.
- Herbicide use in noxious and invasive plant species control.
- Large weed control projects.

Potential Future Proposals Requiring Subsequent NEPA Analysis

- Riparian area restoration needed to mitigate wild horse and livestock grazing impacts.
- Vegetation restoration projects.
- Fuels treatment projects.
- Emergency Stabilization and Rehabilitation projects.
- Guiding permits.
- Wildlife projects.
- Research on natural or cultural resources.
- Herbicide use for noxious and invasive plant species control on additional infestations.

Chapter Six

Consultation and Coordination

Intensity of Public Interest and Record of Contacts

The public will be notified on the Ely District Office website when the Environmental Assessment is completed, Decision Record /Finding of No Significant Impact signed and 30 day appeal period initiated.

The Ely District Office mails a Consultation, Cooperation, and Coordination Letter to individuals and organizations that have expressed an interest in recreation/wilderness related actions. Those receiving the Consultation, Cooperation, and Coordination Letter have the opportunity to request from the Ely District Office more information regarding specific actions. Those requesting notification of recreation/wilderness actions are requested to respond if they want a copy of the final Environmental Assessment and signed Decision Record/Finding of No Significant Impact.

The Proposed Wilderness Management Plan was presented at a Tribal Coordination Meeting in the Ely BLM District Office on January 17, 2007; no comments or concerns were raised. The Lincoln County Coordinated Resource Management Steering Committee established a Technical Review Team to provide scoping comments and review of the Wilderness Management Plan. The Technical Review Team met on March 28, 2007 and provided input into issues and management direction. A letter requesting public input was sent to individuals on the Ely District Office wilderness mailing list on March 6, 2007. A public scoping workshop was held at the Caliente Field Office on April 10, 2007. A meeting was held with grazing permittees affected by this Plan on May 29, 2007. A letter was also sent to affected permittees asking for input on the BLM's assessment of access needs for range improvements on July 31, 2007. Consultation with the Lincoln County Commissioners was held on April 29, 2008 regarding input to the Plan. A letter was sent on June 30, 2008 to every landowner residing in eastern Lincoln County, including members of the Lincoln County Commission, informing them of a public comment meeting that was held inside the County Commission Chambers in the Lincoln County Courthouse on August 5, 2008 as well as notice of a 45 day public comment period on the Draft Plan starting on July 7, 2008. Fourteen comments were received via email and letter throughout the public notification process.

List of Preparers

Wilderness Management Plan and Environmental Assessment Written By

Jamie Fields, NEPA Writer, Great Basin Institute
Karie Wiltshire, NEPA Writer, Great Basin Institute

Wilderness Management Plan and Environmental Assessment Edited By

John M. Wilson, NEPA Writer, Great Basin Institute
Sendi Kalcic, NEPA Writer, Great Basin Institute

BLM Employees Who Formed the Interdisciplinary Team Preparing and Reviewing this Plan

Dave Jacobson, Wilderness Planner
David Jeppesen, Wilderness, Recreation, Visual Resource Management, Areas of Critical Environmental Concerns and Special Designations
Jake Rajala, Planning and Environmental Coordinator
Bonnie Waggoner, Noxious and Invasive Weeds Specialist
Chris Mayer, Rangeland Management Specialist
Shawn Gibson, Archaeologist
Ben Noyes, Wild Horse Specialist
Paul Podborny, Wildlife Biologist
Elvis Wall, Civil Engineering Technician, Native American Religious Concerns
Nick Brunson, Fire Ecologist
Karen Prentice, Emergency Stabilization and Rehabilitation Specialist

BLM and Great Basin Institute Employees Who Provided Periodic Contributions or Expertise

Jack Tribble, Deputy Assistant District Manager, Non-Renewable Resources
Steve Leslie, Wilderness Planner
Heather McKenny, Wildlife Biologist
Brett Colvin, Rangeland Management Specialist
Bill Wagers, Law Enforcement Ranger
Kyle Teel, Fire Ecologist
Steve Smith, Nevada State Office Wilderness Coordinator
Skeet Townley, Great Basin Institute, Wilderness Technician

Other Agencies Consulted With

Nevada Department of Wildlife
Eastern Nevada Landscape Coalition
Nevada Farm Bureau
Nellis Air Force Base
Lincoln County Commission
Lincoln County Coordinated Resource Management Steering Committee
Sustainable Grazing Coalition
USDA─APHIS Wildlife Services
United States Geological Survey
Wingfield Group

Acronyms and Abbreviations

AML	Appropriate Management Level (Wild Horses)
AMR	Appropriate Management Response (Fire)
ARPA	Archaeological Resources Protection Act of 1979
BLM	Bureau of Land Management
BLM—NDOW MOU	Memorandum of Understanding between the Bureau of Land Management and the Nevada Department of Wildlife, Wildlife Management in Nevada BLM Wilderness Areas (BLM MOU 6300-NV930-0402)
EA	Environmental Assessment
EIS	Environmental Impact Statement
FMP	Fire Management Plan
FMU	Fire Management Unit
FRCC	Fire Regime Condition Class
FWS	Fish and Wildlife Service
GPS	Global Positioning System
HMA	Herd Management Area (Wild Horses)
LCCRDA	Lincoln County Conservation, Recreation, and Development Act of 2004
MIST	Minimum Impact Suppression Tactics (Fire)
MRDG	Minimum Requirements Decision Guide
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
RMP	Resource Management Plan
SHPO	State Historic Preservation Office
USDA—APHIS	United States Department of Agriculture — Animal and Plant Health Inspection Service
USGS	United States Geological Survey
WMP	Wilderness Management Plan

Glossary

Annual ─ Completing the life cycle in one growing season or single year.

Archaeological Resource ─ Any material remains of past human life or activities that are of archaeological interest.

Archaeological Site ─ The locations of past human activity, occupation or use, identifiable through inventory, historical documentation or oral history

Catastrophic Wildfire ─ A fire event causing notable ecosystem or societal damage as a result of heavy fuel loads and an unnatural fire regime

Cherry Stem ─ A dead-end road or feature that forms a portion of a wilderness boundary and that remains outside the Wilderness.

Fire Regime ─ The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire.

Former Vehicle Route ─ A road used by motorized vehicles prior to wilderness designation that was closed to motorized or mechanical use by the designation of the area as wilderness.

Invasive ─ Describes a species, which takes over a new habitat where it was not previously found, often to the detriment of species that were there before.

Minimum Tool Requirement ─ The concept of minimum requirement comes from Section 4 (c) of the Wilderness Act of 1964. ***"Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and except as necessary to meet <u>minimum requirements</u> for the administration of the area for the purpose of this Act…"***

Noxious Weed ─ Any plant designated by a federal, state, or county government as injurious to public health, agriculture, recreation, wildlife, or property.

OHV─ Off-highway vehicle.

Perennial ─ Active throughout the year, or living for many years.

Primeval ─ At or from the ancient original stages in the development of something.

Sensitive Species ─ A BLM designation for organisms with any of the following traits: could become endangered or extirpated from a state or within a significant portion of its range in the foreseeable future; is under status review by the FWS; is undergoing significant or predicted downward trends; typically consists of small or widely dispersed

populations; inhabits ecological refugia or specialized or unique habitats; is state-listed but which may be better conserved through application of BLM sensitive species status.

Solitude ─ A quality of quiet remoteness or seclusion in places from which human activity is generally absent.

Untrammeled ─ Not limited or restricted, unrestrained by man.

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Appendices

Appendix One: Noxious and Invasive Weed Risk Assessment

RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

September 21, 2007

Project Name
Fortification Range Wilderness, Parsnip Peak Wilderness, and White Rock Range Wilderness, Wilderness Management Plan and Environmental Assessment

Location
Fortification Range Wilderness, Parsnip Peak Wilderness, and White Rock Range Wilderness in northeastern Lincoln County, Nevada

Summary of project site
This project provides the primary management guidance for the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas. Proposed actions include the designation of two staging areas and one trail, the rehabilitation of unauthorized and former vehicle routes, and the installation of signs and kiosks. The plan also guides the removal of structures, emergency stabilization, and rehabilitation, and the management of weeds within the wilderness areas. Some proposed actions could temporarily disturb the ground, although no ground-disturbing actions are proposed to occur near any of the documented noxious or invasive weed populations.

Noxious and invasive weeds identified in the project area include cheatgrass (*Bromus tectorum*), Dalmatian toadflax (*Linaria dalmatica*), and bull thistle (*Cirsium vulgare*). Cheatgrass is present in small areas at various densities throughout the Fortification Range, Parsnip Peak, and White Rock Range Wilderness Areas. Cheatgrass is broadly adapted to grow on all aspects and diverse types of topography. It thrives where there is weak competition from native perennial and annual plants. The Fortification Range Wilderness is infested widely with cheatgrass, while the Parsnip Peak and White Rock Range Wilderness Areas have fairly small and dispersed patches (Peterson, 2006).

Dalmatian toadflax is classified as a Category "A" weed on the Nevada Noxious Weed List and is targeted for eradication. This perennial weed occupies disturbed sites, and spreads on recently burned land. It been documented in and near the Parsnip Peak Wilderness, and a small infestation of Dalmatian toadflax covers approximately 3,100ft^2 at 2-25 percent cover near the southeastern boundary in T. 2N. R. 69E. sec. 5.

Bull thistle is a biennial invasive weed commonly found on disturbed sites. It has been documented in the White Rock Range and Parsnip Peak Wilderness Areas.

Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.

None (0)	Noxious weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious weed species in the project area.
Low (1-3)	Noxious weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious weeds into the project area.
Moderate (4-7)	Noxious weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious weeds within the project area.
High (7-10)	Heavy infestations of noxious weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious weeds on disturbed sites throughout much of the project area.

Low (3). No ground-disturbing actions are proposed to occur near areas with documented Dalmatian toadflax or bull thistle infestations. A site-specific treatment action is proposed to control the Dalmatian toadflax population near the southeastern boundary of the Parsnip Peak Wilderness. If weed populations expand to any new parts of the project area, the proposed Wilderness Management Plan provides active control and management procedures.

Factor 2 assesses the consequences of noxious weed establishment in the project area.

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (7-10)	Obvious adverse effects within the project area and probable expansion of noxious weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

Moderate (6). The consequences of noxious weed establishment in these Wilderness areas can be evaluated by their effect on Wilderness character, and by their effects on the project's vegetation communities. Currently, these Wilderness areas have few, small, and isolated weed infestations that generally do not deduct from the "natural condition" of these areas. Because the Wilderness Act requires Wilderness areas, "To be managed so as to preserve [their] natural conditions," the consequences of the establishment and spread of noxious and invasive weeds to Wilderness character would be moderate. In addition, the consequences to the vegetation communities in these areas would be moderate, as they generally have reasonable ecological integrity, and are affected with limited ground-disturbances. However, several areas in the Wilderness areas may be prone to unnatural fire regimes and the subsequent, extensive spread of Dalmatian toadflax and cheatgrass.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.

Moderate (18). The risk rating for this project is moderate. Actions to prevent the establishment and expansion of weeds include the site-specific treatment of Dalmatian toadflax. During routine wilderness monitoring (which will occur through the life of the Management Plan), the presence of noxious and invasive species will be recorded, and followed with treatment as guided by the Management Plan. Clear guidelines for managing and treating noxious and invasive weeds are stated in the proposed Management Plan.

Reviewed by: _____ _____

Bonnie Waggoner — Date
Ely District Weed Coordinator

Appendix Two: Ecological Management of Cheatgrass: A Basic Synopsis of Current Research

One of the greatest threats to ecosystem integrity in semiarid regions of the western United States is the invasive winter annual grasses such as cheatgrass and red brome. Upon establishment after disturbance such as wildfire, these species inhibit the establishment of more desirable species by establishing during seasons and at temperatures in which native species are dormant, by exploiting resources when native species are active, and by increasing the likelihood of fire resulting in more frequent fire regimes and the destruction and disturbance of native species, which are less adapted to such regimes and unable to rapidly reestablish.

Due to the double jeopardy of competition and fire, multiple studies suggest that it is difficult to establish native species in invasive annual-dominated areas; however, once perennial species are established in infested areas, many studies have found that invasive, annual grasses diminish. Perennial species hold sites and provide pro-active management opportunities.

The battle with cheatgrass is thus centered on finding the proper seed mix, seeding method, and management strategy to establish perennial species. Introduced species such as crested wheatgrass, blue flax (Maple Grove variety), small burnet, forage kochia, Siberian wheatgrass, and Russian wild rye have been used extensively for post-fire revegetation projects, and have several characteristics that make them highly competitive against cheatgrass: quick establishment, early spring and late fall growth, resistance to spring wildfire, and efficient capture of soil nutrients such as nitrogen. Although fewer studies have evaluated pure native seed mix establishment, there is evidence that some native species may establish and compete as well as some introduced species under particular conditions and seeding methods.

Cheatgrass and assisted succession

Annual cheatgrass-dominated ecosystems do not resemble the ecosystem under which the native species evolved, and have nutrient, temperature, biomass, and water characteristics

that impede post-fire community succession to a native species state. Many researchers argue that management techniques that fight successional trends (such as those that seed natives without adaptive management techniques to ameliorate these inhospitable conditions) are far less likely to succeed than those that "work with" them.

Work by Cox and Anderson (2004) among others suggests that succession trends can be "worked with" when native species are "assisted" by using introduced species and management techniques. Opportunities may exist to facilitate revegetation with native species by planting them at the same time with introduced species. When planted together, the introduced species may act as an "ecological bridge" by rapidly stabilizing soil resources and allowing the seeded native species to become a part of the functional ecosystem by ameliorating environmental stresses and directly assisting germination and seedling establishment. Introduced species may also indirectly facilitate native grass establishment by suppressing invasive annual grasses and their corresponding competitive influence on native species.

Multiple studies have tested "assisted succession" in the Great Basin ecoregion. Cox and Anderson successfully used crested wheatgrass to "capture" a site from cheatgrass by enhancing niche availability for native seedlings. In their experiment on recently burned Wyoming big sagebrush sites, the seeding of crested wheatgrass was followed by the seeding of a diverse native species mix; native species establishment on crested wheatgrass sites was significantly higher than control sites without previous seeding of crested wheatgrass. Because introduced species tend to dominate stands or carryover for succeeding years, impeding the rapid establishment of abundant native species, Waldron et. al (2005) tested whether certain introduced species facilitated more prolific, diverse, and rapid native species establishment; they found that Russian wild rye was significantly more conducive to such establishment in comparison to crested wheatgrass and Siberian wild rye. A study by Thompson et al. (2006) contributed to assisted succession research by testing the nuances of introduced versus native species establishment under different seeding methods and seed mix ratios. They found that while "highly diverse" native seed mixes (8 species) established with certain seeding methods on particular cheatgrass-infested sites established as well as introduced-native species mixes, the price and labor needs were considerably higher, and the results more variable. Lower-diversity native species mixes (4 species) performed significantly worse than the other mixes.

Conclusion

Research is on-ongoing regarding efficient, ecological, species-diverse approaches to controlling and eliminating cheatgrass. The following cited articles provide additional references and valuable summaries on the topic. Page 3 provides additional works that were used to prepare this synopsis.

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Written by Karie Wiltshire
NEPA / Environmental Assessment Specialist
Great Basin Institute – Ely Branch
775-289-4300
kwiltshire@unr.edu

Reviewed by Karen Prentice
Ely BLM District Office Emergency Stabilization and Rehabilitation Coordinator
775-289-1828
Karen_Prentice@nv.blm.gov

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